

2003-2004 *Catalog*



MANCHESTER
COMMUNITY
COLLEGE

MCC Facts

Founded in 1963. Lowe Building dedicated in 1984; Learning Resource Center dedicated October 2000; Arts, Sciences and Technology Center opened January 2003; new Athletics & Fitness Center and Student Activities Center opened in February 2003.

Students	<ul style="list-style-type: none">• MCC serves over 12,000 students a year.• 60% percent of the credit students come from the primary service area of Andover, Bolton, Columbia, Coventry, East Hartford, Glastonbury, Hebron, Manchester, Mansfield/ Storrs, Marlborough, South Windsor, Tolland, Union, Vernon/Rockville, and Willington.• Fall 2002: 5,611 students (credit only); 3,127 (full time equivalent).• Spring 2003: 5,532 students (credit only); 3,010 (full time equivalent).• Average age: 27; 56 percent women; 38 percent full time.• MCC serves "returning students" with associate's, bachelor's, master's and doctoral degrees.• Approximately 27 percent of the credit students are minorities.• Approximately 7,500 students enroll in credit-free programs each year.
Faculty	<ul style="list-style-type: none">• Approximately 361 teaching faculty.• Faculty earned degrees from over 100 institutions, including MCC.
Degrees and Certificates	<ul style="list-style-type: none">• 20,600 degrees awarded since 1965.• Associate Degree programs: accounting, business administration, business office technology (executive, legal, and medical administrative assistant), clinical laboratory technology, communication, computer engineering technology, computer help desk technology, computer information systems, computer network technology, computer programming technology, computer science, computer technology, criminal justice, disabilities specialist, drug/alcohol rehabilitation counselor, early childhood education, engineering science, environmental science, environmental science technician, foodservice management, general studies, graphic design, hotel-tourism management, industrial technology, liberal arts and sciences, manufacturing engineering science, marketing, multimedia, occupational therapy assistant, paralegal, physical therapist assistant, respiratory care, social service, sport and exercise studies, surgical technology, therapeutic recreation and visual fine arts.• Certificate Programs: accounting, child development associate, computer-aided design, computer information systems, computer maintenance technology, computer network technology, computer operating system technology, computer programming technology, criminal justice, culinary arts, desktop publishing, disabilities specialist, gerontology, law enforcement, management of substance abuse treatment facilities, marketing, media technology, microcomputer processing, office information specialist, office microcomputer, office skills update, office support specialist, paralegal, personal financial planning, pre-service corrections, professional baker, professional cook, public relations, real estate, social service, taxation, therapeutic recreation and word processing. Non-credit certificates: certified nurse-aid, dental assistant and emergency medical technician.
Budget	<ul style="list-style-type: none">• Annual budget: \$28 million.• Tuition and fees: \$1,071 for full-time, in-state student per semester.
Facilities, Programs, Special Events and Community Activities	<ul style="list-style-type: none">• A public library, auditorium, bookstore, cafeteria, College Learning Center, Child Development Center, Tech-Prep programs, career services, cooperative education, Alumni Association, MCC Foundation, transitional programs, intercollegiate athletics for women and men, customized training, Excursions in Learning youth and family programs, credit-free courses, World Travel Expeditions, Older Adult Association, Women's Center, Speakers' Bureau, art gallery, athletic fields, fitness center, Bicentennial Band Shell, Center for Student Development, and over 25 student organizations.• MCC hosts various seminars, workshops, exhibitions, and guest speakers each year.



Message from the President ...



To All Our Students:

I am very pleased that you have chosen Manchester Community College. Our business is to help you succeed by helping you develop your skills and your self-confidence, as well as broadening your perspectives. We are very proud of the fact that we have students on our campus from over 50 countries, speaking about 50 languages. We are dedicated to providing you with the opportunity for lifelong learning.

Manchester Community College has always tried to help people solve problems. We will continue to try to assist you in clarifying your options, enlarging your horizons, and building on your strengths. Our highly qualified faculty and staff remain deeply committed to helping all individuals—regardless of race, religion, sex, cultural or ethnic differences, or physical abilities—achieve their potential. We hope you enjoy using our new building, especially the library. Above all, we take pride in the learning that takes place inside our buildings.

We believe that high motivation is a precious commodity. We urge you to be active in setting and achieving your goals. Use all of our facilities; seek extra help from your professors; talk to counselors and other staff members. Do everything you can to make your stay at MCC as productive and worthwhile as it can be. We, for our part, are here to serve you.

A handwritten signature in black ink that reads "Jonathan M. Daube". The signature is fluid and cursive, with the first name "Jonathan" and last name "Daube" clearly legible.

Jonathan M. Daube

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Academic Calendar 2003-2004

SUMMER SESSION 2003 (MCC Continuing Education)

Friday	May 16	Weekend College (Session 6) begins, May 16-June 21
Monday	May 26	Memorial Day (no classes: College offices closed)
Tuesday	May 27	3-week morning session begins May 27-June 13
Tuesday	May 27	6-week day/evening and intensive session I begins, May 27-July 3
Thursday	May 29	Commencement, Class 2003 (no evening classes)
Monday	June 9	8-week day/evening session begins, June 9-July 31
Monday	June 23	6-week day/evening session begins, June 23-July 31
Friday	June 27	Weekend College (Session 7) begins, June 27-August 9
Monday	July 7	6-week day/evening and intensive session II begins, July 7-August 14

FALL SEMESTER 2003

Monday	August 25	Fall semester begins
Wednesday	August 27	New Student Orientation and Convocation
Monday	September 1	Labor Day (College closed)
Tuesday	September 2	Classes begin
Monday	September 8	Continuing Education classes begin
Friday	September 26	Systemwide Professional Day (no day classes, evening classes will be held)
Friday	October 31	Last day to make up incompletes
Monday	November 10	Last day to drop classes without penalty
Tuesday	November 11	Veterans' Day (College closed)
Wednesday	November 26	Thanksgiving recess (no classes, College offices open)
Thursday	November 27	College closed
Friday	November 28	No classes, College offices open
Monday	December 1	Classes resume
Friday	December 12	Last day of classes
Saturday	December 13	Final exams begin
Friday	December 19	Final exams end
Tuesday	December 23	Fall semester ends
Friday	December 26	Continuing Education Winter Intersession courses begin

SPRING SEMESTER 2004

Friday	January 2	Continuing Education Weekend College courses begin
Monday	January 19	Martin Luther King Day (College closed)
Tuesday	January 20	Spring Semester begins, New Student Orientation
Thursday	January 22	Classes begin
Monday	February 16	Washington's Birthday (College closed)
Monday	March 15	Spring recess (no classes, College offices open)
Monday	March 22	Classes resume
Monday	March 29	Last day to make-up incompletes
Wednesday	April 7	Last day to drop classes without penalty
Thursday	April 8	Spring weekend (no classes, College offices open)
Friday	April 9	Good Friday (College closed)
Monday	May 10	Last day of classes
Tuesday	May 11	Final exams begin
Monday	May 17	Final exams end
Thursday	May 27	Commencement, Class of 2004
Tuesday	June 1	Spring semester ends



Important Telephone Numbers

Emergency	860-512-3111	Cooperative Education	860-512-3312
Academic Advising Center	860-512-3320	Child Development Center	860-512-3272
Admissions	860-512-3210	Division Offices	
New Students Information	860-512-3229	Allied Health	860-512-2728
Transfer Transcript Evaluation	860-512-3214	Business and Technology	860-512-2623
Test Exemption	860-512-3229	Health Careers	860-512-2728
International Students	860-512-3205	Liberal Arts	860-512-2663
Athletics & Fitness Center	860-512-3353	Mathematics and Science	860-512-2703
Bookstore	860-645-3140	Social Sciences and Hospitality	860-512-2753
Career Services/Placement	860-512-3372	Financial Aid Office	860-512-3380
Cashiers	860-512-3638	Library	860-512-3420
Center for Student Development		Registrar's Office	860-512-3220
Adults in Transition/Women's Center	860-512-3344	Enrollment Verification	860-512-3223
College Learning Center	860-512-3303	MCC Transcripts	860-512-3225
Counseling Center	860-512-3320	Immunization Information	860-512-3233
International Student Office	860-512-3205	Student Activities	860-512-3283
Learning Disabilities Specialist	860-512-3325	Student Affairs	860-512-3203
Minority Student Programs	860-512-3205		860-512-3206
Office of Transitional Programs	860-512-3344	Veterans Affairs Office	860-512-3362
Placement Testing	860-512-3304	Information	860-512-3000
Continuing Education	860-512-2800		
Business and Industry Services			
Children's Programs			
Credit-Free and Credit Courses			
Older Adult Association			
Weekend College			
World Travel Expeditions			

MCC Web Site

Students may access an electronic version of this catalog and other College information on the MCC Web Site.

MCC Web Site Address www.mcc.commnet.edu

MCC Online Registration www.online.commnet.edu



Manchester Community College Mission Statement

Manchester Community College is a learner-centered institution committed to access, excellence and relevance.

MCC enriches the academic, economic and cultural life of the community it serves by providing comprehensive, innovative and affordable life-long learning opportunities to diverse populations.

To achieve this distinctive mission, Manchester Community College -

- ensures access to any who desire a college experience;
- maintains instruction of the highest quality;
- welcomes people of every ethnicity, national origin, religion, political belief, sexual orientation, age, or disability;
- encourages mutual respect and understanding for people in all their diversity;
- offers support and guidance to those who lack the essential skills and resources that promote learning;
- offers programs and services designed to overcome academic, financial and social barriers;
- provides a foundation in general education through a full range of liberal arts and science offerings, as well as an array of courses for those who wish to develop or upgrade career skills;
- provides a wide range of extracurricular activities for students and the community, including conferences and seminars on academic, political, religious and social issues;
- provides a venue for athletic, artistic, recreational and social events;
- offers on- and off-campus programs tailored to the needs of the business community and other educational institutions.

Admissions

(860-512-3210 or 512-3213)

Matriculation of Students (Degree or Certificate programs)

All new applicants must submit proof of immunizations, a completed admissions application to the College; pay a one-time, non-refundable \$20 application fee; and proof of high school/college graduation or GED. FULL-TIME students carry at least 12 semester hours of credit and PART-TIME students carry fewer than 12 semester hours of credit.

Requirements for Admission

An applicant must be a graduate of an approved secondary school or hold a secondary equivalency diploma, or be a college graduate. Students are required to be in-state legal residents for a period of one full year from the date of the first class of the semester to receive benefits of the in-state tuition rate. Proof of residency may be required by the Admissions Office.

Students are admitted to the College for courses which begin in the fall semester (September) and in the spring semester (January). Persons wishing to study at MCC are urged to apply for admission as early as possible before the semester in which they expect to begin. New and transfer students are encouraged to apply for new student advising and registration, prior to late June for the fall semester and prior to mid December for the spring semester. Dates will be published in the class schedule. New students that apply after these dates can still register during walk-in registration. However, there is no guarantee that the courses students would like to register for will be available at that time. The College admits students on an "open admissions" basis for the majority of its programs.

Health Careers Applications

Students interested in pursuing a health career must fill out a separate Health Career application in addition to the MCC new student application. Health Career applications are available in the Admissions Office. Applications for the Clinical Laboratory Technology, Occupational Therapy Assistant, Respiratory Care, Surgical Technology Programs and Physical Therapist Assistant Program are accepted all year long. Completed applications should be returned to the Admissions Office, L-156. No special application is required for the Therapeutic Recreation Program and Sport and Exercise Studies.

International Student Programs

The Office of Minority and International Student Programs is here to assist international students meet their academic, social and cultural needs while attending Manchester Community College. The Office provides information, programs and activities to increase cultural awareness within the college community and assists enrolled international students with academic opportuni-

ties that the College has to offer. International students speaking over seventy languages representing over fifty countries have attended MCC and many transfer on to four-year institutions to further their academic goals. International student interested in applying to MCC with an I20 application for F1 consideration must do so before May 23, 2003 for the Fall, 2003 semester and November 7, 2003 for the Spring 2004 semester. International students interested in attending MCC with an F1 visa should contact the Director of Minority and International Student Programs for further information to ensure that the I20 application is processed in a timely manner for Immigration and Naturalization Service, or U.S. State Department approval. Application packets are also available in the Admissions Office, the Dean of Student Affairs Office, and the Center for Student Development. International students on a visa other than F1 may enroll for classes at MCC, but they should consult the Immigration and Naturalization Services office, or the Director of Minority and International Student Program to verify student eligibility. For more please call 860-512-3205

Financial Aid and Deferment of Tuition: Tuition may be deferred at the time of registration only for students who have completed the financial aid process and have been determined eligible for it. All the necessary documents must be on file in the MCC Financial Aid Office by May 15 for the fall semester and October 1 for the spring semester (refer to the Financial Aid section for details).

Transcript Evaluation

Students wishing to transfer course work completed at another college or university, or by CLEP (College Level Examination Program) or other standardized examination, must request that an official transcript of previous college work be sent to the Admissions Office at MCC (L-156). Transcripts will be evaluated on a rolling basis. Transfer credit will not be awarded until the matriculation requirements listed above are met. For further information, see *Transfer Policies and Credit by Exam* on pages 17-18.

It is recommended that students planning to enroll in a college transfer program of study meet with a transfer counselor (Counseling Center L-133). It is especially important for students to be informed fully about the requirements of the transfer college or university because of differences in program requirements among institutions.

Application forms and other information about applying for admission can be obtained from the Admissions Office either by a personal visit to the office in the Lowe Building, or by request mailed to the Admissions Office, Manchester Community College, Great Path, P.O. Box 1046, Manchester, CT 06045-1046 or visit our Web Site www.mcc.commnet.edu. Applications must be accompanied by an official college or high school transcript or GED and an application fee of \$20.00.

The Admissions Office staff is available to assist anyone needing further information. For dates of open house or information sessions and tours, please call 860-512-3210.

Placement Tests

English and math placement tests are required for all degree and certificate candidates after they have been accepted for admission. Tests must be taken prior to registration. Transfer students having mathematics and English credits will be exempted from taking placement tests in those subjects. For partial testing, the approved exemption form must be presented to the test administrator before testing. Those whose English or math placement test results indicate any serious deficiencies will be required to take one or more developmental courses. The results of the placement tests will be used to determine the individual's level of achievement in math and/or English and will determine appropriate class placement. For more information about placement testing, call 860-512-3304 or visit the College Learning Center website at www.mcc.commnet.edu/clc/.

Students accepted into Health Career Programs are required to meet with the specific Health Career Coordinator to obtain test results and for planning course selection.

Business Careers Students: Placement examinations for beginning shorthand or keyboarding will be administered upon request to students who have successfully completed one or more years of shorthand or keyboarding in high school, or who have demonstrated considerable skills in these areas. Students who pass these placement examinations need not take introductory courses. For further information, speak with the Director of the Center for Business and Technologies and the Director of the Social Science and Hospitality Division.

Advanced Placement Program

Advanced placement may be granted to entering students on the basis of scores on the College Entrance Examination Board Advanced Placement Examination as follows: Scores of 3, 4 and 5 are granted degree credit for equivalent courses as determined by the academic divisions. All paperwork should be submitted to the Admissions Office. For questions referring to specific courses, please call the appropriate academic division.

Re-Admission

Students who have been accepted and enrolled in a degree or certificate program of study at MCC should submit a re-admission form if progress towards completion of their program has been interrupted by an absence from the College for one or more semesters or less than 5 years. (*Please note: students applying for re-enrollment into Health Careers programs will be placed in the General Studies Health Careers pool pending reapplication and acceptance to the specific Health Careers program.*) It is not necessary to submit a new set of credentials or another \$20 admissions application fee with the re-enrollment form. However, students who attend another college during an absence from MCC, must submit an official transcript of those studies to the Admissions Office in order to receive credit at MCC.

Cross-Registration Privilege

A cross-registration privilege exists for students who register for General Fund courses at multiple colleges within the state system of higher education. A student who has proof of payment for the maximum full-time tuition at their "home" institution is exempt from further charges at a state university, the University of Connecticut, or another community college. A student who has paid the tuition and fees of a part-time student at their "home" institution and registers for additional courses at another college shall not exceed the amount charged for a full-time student, if the student's combined registration at both institutions would classify them as a full-time student. If you are a financial aid recipient and you are attending another higher education institution at the same time, please see the Financial Aid Officer. This exchange privilege is offered on a space-available basis only. All students interested in this special cross-registration plan should contact the Registrar's Office or the Assistant to the Dean of Student Affairs.

Measles and Rubella Immunization

Any student enrolled full-time or in a program, who was born after Dec. 31, 1956, must provide proof of adequate immunization against measles and rubella before enrollment in classes in state institutions of higher education. Allied Health students may be required to have additional immunization. Further information is available in the Registrar's Office.

New England Regional Student Program

Manchester Community College is a member of the New England Regional Student Program. The program provides an opportunity for students to earn an undergraduate degree in certain programs not offered at a college near their home or in their home state. Under this program, an out-of-state student will be charged the regular resident tuition plus a 50 percent surcharge. Ask the Admissions Office for further information about this program.

Admissions *continued*

High School Partnership Program

This program, developed by the Board of Trustees of Community-Technical Colleges, provides the opportunity for a high school junior or senior with a "B" average to enroll in college credit courses (8 maximum) at MCC at no cost. For students to participate, their high school must have a signed partnership contract on file with the college. Each term students must also have the written recommendation of the high school principal or counselor. Students are responsible for their books and transportation. Please call the MCC Admissions Office 860-512-3210 for further information.

Tech Prep Program

The Tech Prep program is a combined secondary and post secondary educational program that allows students in high school to obtain advanced standing by earning college credits in certain business, occupational and technology courses at MCC. This is a formal articulation program between MCC and a consortium of area high schools. High school students must follow guidelines for admission to the Tech Prep program as established by their high school and MCC. Students will take the Tech Prep courses at their high schools in the 11th and 12th grades. Upon successfully completing the high school portion of the program and graduating from high school, the student can complete the program at MCC.

The student has the opportunity to earn up to 14 college credits by the end of his/her senior year of high school. The student must meet the same college level standards that are expected of students attending MCC. Please contact the Admissions Office or your counselor for application information.

Veterans

Veterans are served by the staff in the Financial Aid Office. The staff will assist eligible veterans in applying for monthly benefits, tuition waivers, and other educational benefits.

All veterans seeking monthly benefits must be matriculated into a degree or certificate program. Only courses that are directly applicable to their degree program will count towards eligibility for monthly benefits. The Department of Veterans Affairs does not pay benefits to students taking dual degrees with the exception of Foodservice Management/Hotel-Tourism Management. Veterans that are transfer students must request an official transcript to be sent to our Admissions Office for evaluation of prior credit.

The College may award credit for certain courses completed in the service (including MOS proficiency). Veterans may submit course completion documents or other appropriate evidence of military training and/or qualifications to the Admissions Office for evaluation. Veterans are reminded that credit can also be earned through the College Level Examination Program (CLEP). Information about CLEP exams can be obtained from the Admissions Office.

Veterans who are eligible to receive educational benefits must submit their DD 214. If a member of the CT National Guard, the student must request through his/her unit education officer a Notice of Basic Eligibility (NOBE) and a certificate of eligibility prior to the start of classes in order to receive benefits.

Veterans are eligible for a full tuition waiver for general fund courses if they were:

- honorably released from the service;
- in active duty (at least 90 days) during specific periods of conflict, on active duty while engaged in combat, or a combat support role during peace-keeping missions. Please see the Veterans Affairs advisor in the Veterans Affairs Office to see if you qualify. *(The Office of the State Attorney General has recently ruled that active duty, in this context, does not include active duty for training, purposes, i.e., attending basic and related training, annual training, and attendance at military schools. Therefore, while waivers for national guardspersons are otherwise covered by express statutory provisions, service in time of war for reservists requires actual mobilization for*

service in the military other than for training purposes, i.e., to perform a military job or function.)

Fees are not included, and summer session and winter intersession courses are not covered.

In order to assure the uninterrupted flow of monthly VA benefits, Veterans must certify their on-going class attendance by logging in once a month in Room L-131g in the Lowe Building. Failure to do so requires the College to promptly notify the Veterans Administration of non-attendance. This action will result in a termination of a student's benefits. Veterans are responsible for satisfactory pursuit of the courses in which they register and for notifying the Veterans Affairs Office of any withdrawals from courses. For more information, please contact the Veterans Affairs Office at 860-512-3362.

MCC Graduate Transfers

Manchester Community College students are able to transfer to many colleges and universities. Because requirements of baccalaureate institutions vary greatly, students should select a transfer institution early and consult with a counselor or program coordinator as to the transferability of their course selections.

Some of the colleges and universities that have accepted MCC credits include the following:

American International College	Smith College
Amherst College	Southern Connecticut State University
Antioch College	Springfield College
Art Institute of Boston	State University of New York at Albany
Assumption College	State University of New York at Stony Brook
Babson College	State University of New York at Binghamton
Bentley College	Syracuse University
Boston University	Thomas Edison College
Bryant College	Teikyo Post University
California Polytechnic State University	Trinity College
Central Connecticut State University	University of Arizona
Charter Oak College	University of Bridgeport
Columbia University	University of Chicago
Connecticut College	University of Colorado
Cornell University	University of Connecticut
Eastern Connecticut State University	University of Florida
Emerson College	University of Hartford
Fairfield University	University of Hawaii
Fashion Institute of Technology	University of Houston
Florida International University	University of Illinois
George Mason University	University of Maine
Goddard College	University of Massachusetts
Howard University	University of Nevada
Johnson and Wales	University of New Hampshire
Lesley University	University of New Haven
Marietta College	University of North Carolina
Massachusetts College of Art	University of Rhode Island
Mount Holyoke College	University of Virginia
New York University	Wesleyan University
Northeastern University	Western Connecticut State University
Oregon State University	Western New England College
Parsons School of Design	Westfield State College
Quinnipiac University	West Virginia Wesleyan
Rhode Island School of Design	Williams College
Roger Williams College	Worcester Polytechnic Institute
Sacred Heart University	Yale University
Saint Joseph College	
Saint Leo College	

Connecticut Community College System Schedule of Fees

TUITION AND FEES ARE SUBJECT TO CHANGE.
AT THE TIME OF REGISTRATION,
ALL STUDENTS ARE REQUIRED TO PAY THEIR FEES.

Tuition and Fees

Tuition and fees are payable in advance in accordance with deadline dates announced each semester.

The following is a complete schedule of tuition and fees, prepared by the Board of Trustees of Community-Technical Colleges effective Fall 2003.

Connecticut Residents Tuition & Fees Per Semester

Semester Hours	Tuition	College Services Fee	Student Activity Fee	Total
1.0	\$84.50	\$46.25	\$5.00	\$135.75
2.0	\$169.00	\$48.50	\$5.00	\$222.50
3.0	\$253.50	\$50.75	\$5.00	\$309.25
4.0	\$338.00	\$53.00	\$5.00	\$396.00
5.0	\$422.50	\$62.75	\$5.00	\$490.25
6.0	\$507.00	\$72.50	\$5.00	\$584.50
7.0	\$591.50	\$82.25	\$5.00	\$678.75
8.0	\$676.00	\$92.00	\$5.00	\$773.00
9.0	\$760.50	\$101.75	\$5.00	\$867.25
10.0	\$845.00	\$111.50	\$5.00	\$961.50
11.0	\$929.50	\$121.25	\$5.00	\$1,055.75
12.0	\$1,014.00	\$131.00	\$10.00	\$1,155.00

+ \$42.25 tuition per additional half credit

Non-Resident Rates Tuition & Fees Per Semester

As of July 1, 1991, residency for in-state tuition purposes: an emancipated person must have resided in this state for a period of not less than one year.

Semester Hours	Tuition	College Services Fee	Student Activity Fee	Total
1.0	\$253.50	\$138.75	\$5.00	\$397.25
2.0	\$507.00	\$145.50	\$5.00	\$657.50
3.0	\$760.50	\$152.25	\$5.00	\$917.75
4.0	\$1,014.00	\$159.00	\$5.00	\$1,178.00
5.0	\$1,267.50	\$188.25	\$5.00	\$1,460.75
6.0	\$1,521.00	\$217.50	\$5.00	\$1,743.50
7.0	\$1,774.50	\$246.75	\$5.00	\$2,026.25
8.0	\$2,028.00	\$276.00	\$5.00	\$2,309.00
9.0	\$2,281.50	\$305.25	\$5.00	\$2,591.75
10.0	\$2,535.00	\$334.50	\$5.00	\$2,874.50
11.0	\$2,788.50	\$363.75	\$5.00	\$3,157.25
12.0	\$3,042.00	\$393.00	\$10.00	\$3,445.00

+ \$126.75 tuition per additional half credit

NEBHE Tuition & Fees Per Semester

Semester Hours	Tuition	College Services Fee	Student Activity Fee	Total
1.0	\$126.75	\$69.25	\$5.00	\$201.00
2.0	\$253.50	\$72.75	\$5.00	\$331.25
3.0	\$380.25	\$76.00	\$5.00	\$461.25
4.0	\$507.00	\$79.50	\$5.00	\$591.50
5.0	\$633.75	\$94.00	\$5.00	\$732.75
6.0	\$760.50	\$108.75	\$5.00	\$874.25
7.0	\$887.25	\$123.25	\$5.00	\$1,015.50
8.0	\$1,014.00	\$138.00	\$5.00	\$1,157.00
9.0	\$1,140.75	\$152.50	\$5.00	\$1,298.25
10.0	\$1,267.50	\$167.25	\$5.00	\$1,439.75
11.0	\$1,394.25	\$181.75	\$5.00	\$1,581.00
12.0	\$1,521.00	\$196.50	\$10.00	\$1,727.50

+ \$63.25 tuition per additional half credit

Additional Mandatory Usage Fees Per Semester

Laboratory Course Fee	\$50.00	Per registration in a designated laboratory course
Studio Course Fee	\$56.00	Per registration in a designated studio course
Clinical Program Fee-Level 1	\$175.00	Per semester (Fall & Spring only) Level 1 allied health programs
Clinical Program Fee-Level 2	\$125.00	Per semester (Fall & Spring only) Level 2 allied health programs

Extension Fund Fees

(for more information, see Credit-Free Catalog)

- Extension Fund student - per semester hour

regular academic year	90.00
summer session	90.00
on-campus, weekdays, weekend, regular semester (5)	90.00
- Extension Fund student - credit-free (rate set on a per course basis, depending upon course offered.)

Special Fees

- Application Fee (6)

full-time student	20.00
part-time student	20.00
- Laboratory Course Fee
(Per registration in a designated laboratory course) 50.00
- Studio Course Fee
(Per registration in a designated studio course) 56.00
- Clinical Program Fee-Level 1 (Per semester [Fall & Spring only] -
Level 1 allied health programs) 175.00

Connecticut Community College System Schedule of Fees *continued*

5. Clinical Program Fee-Level 2 (Per semester [Fall & Spring only] - Level 2 allied health programs)	125.00
6. Program Enrollment Fee (7)	10.00
7. Late Registration Fee	5.00
8. Graduation Fee (local option)	33.00
9. Transcript Fee	3.00
10. Installment Payment Plan	25.00
11. Late Tuition/Fee Payment	15.00
12. Returned Check Fee	25.00
13. Replacement of lost ID card	1.00
14. CLEP Examination Fee (8) for general or subject exams one exam	40.00
each additional exam, same month	40.00
15. Academic Evaluation Fee	15.00
16. TV course student - per course (3 credit hours)	7.25*
<i>*In addition to applicable tuition.</i>	
17. Portfolio Assessment Fee	50.00

Fee Deposit - Non-Refundable

Full-time and part-time students at the time of registration must pay a non-refundable deposit of all fees applicable to the courses for which registered, including courses for audit, exclusive of tuition.

The total tuition applicable to the courses for which registered, including courses for audit, is payable in one installment and is due six weeks before the first day of classes unless a deferred payment schedule, in accordance with approved Board of Trustees policy, has been approved.

Installment Payment Plan

An Installment Payment Plan is available to students who are registered for a minimum of eight (8) semester hours. Students may apply for an installment payment plan at the time of registration. There is a \$25 non-refundable fee for participation in the plan.

Footnotes:

- Students enrolled in Tuition Fund courses and/or Educational Extension Fund courses carrying 12 semester hours or more will be classified as full-time students for general fee purposes.
- Waivers:
 - Complete waiver of tuition for dependent child of person missing in action or former prisoner of war.
 - The Connecticut Tuition Waiver is available for veterans who served on active duty (for at least 90 days) in the U.S. Armed Forces during time of war and were released from active duty under honorable conditions. The periods of conflict are: the Vietnam Era (1/1/64 to 7/1/75), the Korean hostilities (6/27/50 to 10/27/53), World War II (12/7/41 to 12/31/46), World War I (4/6/17 to 11/11/18) and any previous periods of conflict as far back as the Spanish-American War (4/21/98 to 8/13/98). The 100 percent tuition waiver is available for veterans if they are residents when accepted for admission.

c. The tuition fees of veterans of armed forces who served in either a combat or combat support role in the invasion of Grenada, the peace keeping mission in Lebanon, or service during Operation Desert Shield and Operation Desert Storm (8/1/90-6/30/94) shall be waived. To be eligible for such waiver, a veteran must be a resident of Connecticut at the time he/she is accepted for admission and be honorably discharged or released under honorable conditions from active service in the armed forces. "Combat or combat support role" means assigned to the theatre of operations during the invasion or peace keeping mission. Persons who believe they may qualify for this waiver of tuition should speak with the representative of Veterans' Affairs in the Financial Aid Office for further information about eligibility requirements.

d. FOR THE ELDERLY, QUALIFIED VETERANS AND THE CHILDREN OF CERTAIN VETERANS. (General Fund Classes Only)

Students age 62 or older may register with a tuition and fee waiver on the last day of Walk-In Registration. Proof of age must be submitted to the Business Office to complete the eligibility requirements for this waiver.

- Tuition may be waived or remitted by the President, or his designated appointee, for any in-state student who demonstrates substantial financial need and who is enrolled on a full-time or part-time basis in a degree or certificate program or a pre-college remedial program.
- Tuition shall be waived for any student attending the Connecticut State Police Academy who is enrolled in a criminal justice program at the Academy that is offered in coordination with a regional community college that accredits courses taken in the program. This waiver applies only to courses taken at the Connecticut State Police Academy and not to course work required for a degree taken at the college.
- The tuition fees of any eligible member of the Connecticut Army or Air National Guard shall be waived. To be eligible for such waiver, a member of the Connecticut Army or Air National Guard must (1) be a resident of Connecticut, (2) present certification by the Adjutant General or his designee as a member in good standing of the Guard, and (3) be enrolled or accepted for admission to a regional community college on a full-time or part-time basis in a degree granting program. The tuition waiver shall be reduced by the amount of any educational reimbursement received from an employer.
- The Community College Presidents are authorized to waive the Student Activity Fee only for students enrolled in Tuition Fund financed courses offered at off-campus locations.

- General Fees are applicable to both Tuition Fund and Extension Fund students, except the TV course and courses by newspaper.
- On-campus Extension Fee: rate applies to on-campus Extension Fee courses that permit the colleges to enroll additional students beyond the level supported by the General Fund.
- Not applicable for the following: (a) CONNTAC applicants, (b) Upward Bound applicants and (c) needy and deprived students as determined by college.
- Not applicable if student paid the \$20 application fee.
- CLEP exam fees are payable to College Level Examination Board and are not deposited or held in state accounts.

College Presidents, with the approval of the Executive Director, are authorized to waive general and special fees of students enrolled in special programs when the circumstances justify such action.

Refunds

Refunds of Tuition Only

(Refunds of tuition paid by charge card will be processed directly through the student's charge card account.)

Requests for the refund of General Fund (state supported) tuition must be made in person or in writing. Requests made by telephone will not be accepted. Fees will not be refunded (see single exception on Connecticut Community College System of Fees, page 10). First time students on financial aid should refer to the following page for refund procedures.

General Fund Courses:

Students who wish to withdraw from the College shall direct their requests in writing for refunds to the Registrar. Refunds are made according to the conditions and in the amount set forth as follows.

If notice of complete withdrawal from the College is received prior to the first day of classes of the semester, 100 percent of the tuition only for all courses in which one has registered will be refunded. If notice of withdrawal is received within the first 14 calendar days of the semester, a 50 percent refund of tuition only will be made.

If notice of a reduction in course load is received during the first 14 calendar days of the semester, a refund of 50 percent of the difference in tuition only between the original and revised schedules will be made.

No refunds will be granted beyond the 14th calendar day of the semester, except that a 100 percent refund of tuition and fees will be granted to students who enter the armed services before earning degree credit in any semester, provided that they shall have submitted in writing a notice of withdrawal and a certified copy of enlistment papers.

Any exception must be submitted to the Dean of Students in writing with a detailed description of the circumstances. Circumstances that will **NOT** be considered are: changes to work hours, commuting difficulties or dissatisfaction with course content. *Regardless of circumstances, refund request cannot be considered after the 14th calendar day of the semester.*

Refund Policy for Continuing Education Courses

(Refunds of tuition paid by charge card will be processed directly through the student's charge card account.)

Cancellations:

If the College cancels a Continuing Education course, students will receive a full refund of all tuition and service fees. **This does not include the \$20 one-time application fee for new credit students which is non-refundable.**

Withdrawal From a Continuing Education Extension Credit Course:

A student who withdraws from a **credit** extension course prior to its first scheduled meeting will receive a full refund of **tuition only**, provided that a written request for refund is received by the office of the Registrar no later than 4 p.m. on the day before the first scheduled class meeting. (Requests must be made by 4 p.m. Friday for a course starting Saturday-Monday.) **When a student withdraws from a credit course, the College Service Fee, Student Activity Fee, and the one-time application fee for new students are non-refundable. No refunds will be made once a class has met.** *Note: Credit Extension includes Weekend College, Winter Intercession, Summer School and off-campus courses.*

Exceptions:

Exceptions that will be considered by the Associate Dean of Continuing Education are: severe illness of the student or an immediate family member as verified by a physician, or administrative error. Any exception must be submitted to the Associate Dean of Continuing Education **in writing** with a detailed description of the circumstances. Circumstances that will **NOT** be considered

are: changes in work hours, commuting difficulties or dissatisfaction with instructor or course content. **Regardless of circumstances, refund requests cannot be considered after the second class meeting.**

Withdrawal from a Continuing Education Credit-free Course:

Refunds are issued only for credit-free courses that MCC cancels, or if a written request is received five (5) business days prior to the first scheduled class meeting. Regardless of circumstances, no exceptions will be considered.

Requests for refunds may be made: in person (room LRC B-147 in the Learning Resource Center), by fax (860-512-2801), or mail (Continuing Education, MS #16, MCC, P.O. Box 1046, Manchester, CT 06045-1046).

It is the student's responsibility to call Continuing Education at (860) 512-2800 at least five (5) business days prior to the start date of the class to verify receipt of the written request for refund. If you fail to call and we have no record of your request, you are ineligible for a refund. Refunds are issued by the State Comptrollers' Office and take approximately four to six weeks to process.

Financial Aid

The Financial Aid Program at Manchester Community College is designed to provide access for as many eligible students as current funding will allow. The prime objective of our Financial Aid Program is to meet the basic expenses of tuition, fees and books. (At the time of registration, all students are required to pay their fees.) In addition, many recipients qualify for stipend checks that repay their initial expenses for supplies and transportation costs. Also, many other students are eligible for work study and student loans to more fully meet their expenses for room, board, transportation, personal, health and child care costs.

Estimated Budgets for 2003-2004 Award Year

Budget 1: Living with Parents

<u>Enrollment Status</u>	<u>Full-Time</u>	
Tuition & Fees	\$2,310.00	<i>(Tuition & Fees are subject to change)</i>
Books & Supplies	800.00	
Transportation	1,480.00	
Room & Board	1,756.00	
Personal Misc.	<u>1,596.00</u>	
Total	\$7,942.00	

Budget 2: Not Living with Parents

<u>Enrollment Status</u>	<u>Full-Time</u>	
Tuition & Fees	\$2,310.00	<i>(Tuition & Fees are subject to change)</i>
Books & Supplies	800.00	
Transportation	1,480.00	
Room & Board	5,572.00	
Personal Misc.	<u>3,032.00</u>	
Total	\$13,194.00	

Basic Eligibility Criteria:

To be eligible for financial aid a student must:

- Be a citizen or eligible non-citizen of the United States;
- Be enrolled in an eligible degree or certificate program (audited courses do not count towards enrollment status);
- Have a high school diploma or GED on file at the Admissions Office;
- Be registered with Selective Service, if male; and
- Be in academic good standing and maintaining satisfactory progress according to federal regulations.

Financial Aid *continued*

How to Apply:

- 1) Complete the Free Application for Federal Student Aid (FAFSA) and mail it to the processor as soon as possible or apply through the internet (FAFSA on the web at <http://www.fafsa.ed.gov/>). In order for us to receive your application information from the processor, you must include MCC as one of the colleges you plan to attend. Our Title IV code is 001392.
- 2) Enroll in an eligible degree program through the Admissions Office.
- 3) Have a high school diploma or GED on file at the Admissions Office.
- 4) Submit tax returns, corrections and any other required documentation to the Financial Aid Office in a timely manner.
- 5) Log on to www.online.commnet.edu to check your status.

Deadlines

- Priority is given to early, accurate, financial aid applicants.
- To ensure timely consideration, you should have your paperwork on file in the Financial Aid Office by May 15 for the fall semester and Oct. 1 for the spring semester.
- After these dates, applications will be processed on a rolling basis throughout the year.

**AT THE TIME OF REGISTRATION,
ALL STUDENTS ARE REQUIRED TO PAY THEIR FEES.**

Deferment of Tuition

Students who are financial aid eligible and have met all the necessary requirements (*steps 1 through 5 above*) by May 15 for the fall semester and October 1 for the spring semester will be entitled to a deferment of their tuition.

A student who is entitled to a deferment of their tuition will not be required to pay by the tuition due date. Instead, the Business Office will be notified electronically of the student's award, before the tuition due date. Tuition due the college will be deducted from their financial aid award.

Also, you should be aware that under certain conditions, you may have to pay the amount due at a later date. These conditions include, but are not limited to:

- failure to respond in a timely manner to our requests for missing information;
- withdrawal from any or all of your courses;
- unsatisfactory academic standing;
- a final review of your application which results in your not being eligible for aid.

Student Loans

- Students are advised to wait for a complete review of their eligibility for other forms of financial aid before submitting loan applications.
- Students who are applying for a loan must also complete the above application process.
- Student Loan Applications are available in the MCC Financial Aid Office. This application must be completed and submitted to the Financial Aid Office.
- The deadline for submission of loan applications is November 1 for the fall and March 15 for the spring.

Book Purchases

At the time of registration, all students are required to pay their fees. There is no financial aid book charge at MCC. Students are responsible for paying for their books at the start of each semester. Students are advised to have "start up" money set aside for fees, books, supplies, and initial transportation costs.

Disbursement

Financial aid refunds are processed after students have accepted their award. This process cannot begin until the registration and course adjustment periods are over. The amount of the refund would equal a student's financial aid award (excluding College Work Study and student loans), minus anything owed the College such as tuition, or Child Development Center expenses.

Sometime between the middle and the end of the semester, checks will be available to students who are entitled to financial aid.

Title IV Federal Financial Aid: Policy for Return of Title IV Funds

1. Any student who is attending MCC and is receiving student financial assistance under the federal Title IV Programs may be entitled to a refund if they completely withdraw from their program. The percentage of the period that the student remains enrolled is derived by dividing the number of days the student attended by the number of days in the period. Calendar days are used, but breaks of at least 5 days are excluded from both the numerator and denominator. The refund shall be less an administrative fee which is not to exceed the lesser of five percent (5%) of the tuition, fees and other charges assessed the student, or one hundred dollars (\$100).
2. During the first 60 percent of the period, a student "earns" Title IV funds in direct proportion to the length of time he or she remains enrolled. That is, the percentage of time during the period that the student remains enrolled is the percentage of disburseable aid for that period that the student earned.

A student who remains enrolled beyond the 60 percent point earns all aid for the period.
3. In addition, students who withdraw from a program are subject to a calculation which determines the amount of cash disbursement (i.e., the disbursement made to the student to meet necessary educational expenses beyond the payment of tuition and fees) that a student may be required to pay back to the College or the federal government. This calculation will be in accordance with formula and guidelines established by prevailing federal regulations, and funds will be allocated in the following order (not to exceed the original allotment from each source): FFELP (unsubsidized and subsidized), Federal Direct, Federal Pell Grant, FSEOG, and other funds.

Verification Procedures

Your Student Aid Report (SAR) may be selected by the Department of Education for a process called verification, in which case you will be required to submit certain documentation in order for processing to continue on your financial aid application. Students will be notified of the documentation required and deadline dates when the information is received electronically by the Financial Aid Office.

Failure to submit completed verification documents to the Financial Aid Office can result in:

- Loss of financial aid for the semester or academic year;
- Loans not being approved; and
- Future applications for financial aid not being processed.

Helpful Hints for Applicants

- 1) Apply early.
- 2) Read instructions at the front of the booklet carefully before filling out the application. It is also helpful to have a copy of your previous year's tax return before starting the FAFSA.
- 3) Have start-up money when beginning classes. There is no book vouchers available.
- 4) Keep us informed of any changes in enrollment status. Remember that audited courses cannot be covered by financial aid programs and could put you in a repayment situation.
- 5) Keep your mailing address current with the Financial Aid and Registrar Offices.
- 6) Sign your award letter and return it to the Financial Aid Office promptly so that we can clear your account with the Business Office.

Financial Aid Programs

Financial Aid programs include grants, loans, and part-time jobs. Some of the major programs are: State of Connecticut Grants, Federal Family Education Loans (subsidized, unsubsidized, and PLUS), Federal Perkins Loans, Federal Pell Grants, FSEOG, and Federal Work Study. In addition, SFA funds are available for Study Abroad programs as well as Distance Learning courses.

Additional Information

Additional information about all federal programs and federal regulations is provided in the Financial Aid Office web page as well as in the annually updated Federal Student Aid Guide. This guide is available in the Financial Aid Office.

MCC Foundation Scholarships

The MCC Foundation provides scholarships for both full- and part-time students. This past year, the Foundation distributed 70 scholarships and over \$50,000 to MCC students. Basic criteria includes financial need, community service and a grade point average of 3.0 or better/or an indication of steady academic progress. Application deadlines are April for the fall semester and October for the spring semester. For information on the MCC Foundation Scholarships, contact Dianne McHutchison in the Office of Institutional Development at 860-512-2904.



Academic Policies

Academic Honors

To encourage and recognize academic excellence, Manchester Community College has established a President's List and a Dean's List.



Full-Time President's List

The President's List recognizes the exceptional scholarship of students who earn a 4.0 or "A" Grade Point Average in their courses. Full-time students who have completed at least 12 credits for the semester with no "W" or "I" grades are eligible for this honor.

Part-Time President's List

After a part-time student has accumulated 12 credits in residence, that student may be considered for the Part-Time President's List. Part-time students who have earned a 4.0 GPA with no "W" or "I" grades in that semester are eligible for the Part-Time President's List.

Dean's List

Students enrolled in three credits or more and who have earned a GPA of 3.4 are eligible for the Dean's List. An official withdrawal or incomplete grade for any class during the semester will make the student ineligible for semester honors. However, once a grade is assigned upon completion of the coursework in accord with specific guidelines, and a new grade point average calculated, any honors for which the student is eligible may be entered on the student's academic record retroactively.

Phi Theta Kappa

Students who have established a GPA of 3.75 or above and have earned 12 credit hours at MCC are extended an invitation to join Phi Theta Kappa. Phi Theta Kappa is the only internationally acclaimed honor society for colleges offering associate degree programs. Membership in Phi Theta Kappa offers students opportunities for leadership, fellowship, scholarship, and community service, as well as providing an intellectual climate for continued academic excellence. Phi Theta Kappa members in good standing may wear the organization's gold tassel and stole during graduation.

Graduation Honors

- 3.9 to 4.0 grade point average - Summa Cum Laude
- 3.7 to 3.89 grade point average - Magna Cum Laude
- 3.4 to 3.69 grade point average - Cum Laude

An incomplete grade for any class during the semester will make the student ineligible for honors at graduation. However, upon completion of the coursework, if the student has earned the required grade point average, the appropriate level of recognition will be noted on the student's official transcript.

Valedictorian and Salutatorian

Graduating students who have completed at least 30 credits at Manchester Community College are eligible for consideration as valedictorian or salutatorian. Among the eligible students, the student with the highest cumulative GPA will be designated the valedictorian and the student with the second highest cumulative GPA will be named the salutatorian. In the case of identical averages, the student with the larger number of credits will be the valedictorian. If the GPAs and the number of credits taken at MCC are the same for two students, the pair will be named co-valedictorians.

Academic Policies *continued*

Gold Cord

Only students who are Summa Cum Laude graduates may wear a Gold Cord (effective May 2003).

The Board of Trustees Medallion

The Board of Trustees Medallion is awarded at each of the twelve community colleges to graduating students who have earned perfect 4.0's and who have completed at least half of their requirements at the college where the degree is being awarded. Certificate programs are not included for this award.

Academic Standing (Satisfactory Progress)

Good Academic Standing

In order to be considered in good standing, a student must attain an overall GPA minimum as indicated below.

1.5 after 12 attempted hours*

1.6 after 30 attempted hours*

1.8 after 45 attempted hours*

2.0 QPA is necessary for graduation in degree and certificate programs.

* Attempted hours include any course that is graded .

This standard will be applied for students who are registered for courses past the add/drop period in any semester. It will be applied when the student first attempts 12 or more credits, and each semester thereafter in which he/she is registered including summer and winter intersession.

Grades included in the calculation of academic standing are A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F, W, I.

Academic standing will be recomputed upon completion of any course in which an "I" incomplete grade is received. Students will be notified in writing of any change in academic standing at this time.

Probation

Students who do not achieve the necessary overall GPA to remain in good standing will be placed on academic probation. They will be notified in writing by the Dean of Student Affairs. Please note that Allied Health programs have additional academic standing requirements.

Students placed on probation will not be allowed to register for more than 10 credits for the next semester and cannot qualify for financial aid.

Students have the option to appeal their probation status in writing, to the Dean of Students within 20 days of their notification if they believe there are "special circumstances." "Special circumstances," to be considered on an individual basis, may include but are not limited to: obligations of employment, military duty, or medical problems.

Suspension

Students who are on academic probation and who fail to achieve the minimums outlined in *Academic Good Standing* at the close of the semester in which the student is registered will be placed on academic suspension. Students may request to be reinstated. A request in writing must be submitted to the Dean of Student Affairs. When reinstated, students are restricted to a maximum of 10 credits until the overall GPA is raised to the minimum. Any special circumstances must be directed in writing to the Dean of Student Affairs.

Fresh Start Option

Students who are re-admitted to MCC after an absence of three (3) or more years who have been suspended or are on probation, and who have an accumulative grade point average of less than 2.0 are eligible to elect the Fresh Start Option. Application must be made within one year of being re-admitted to the College. A student re-admitting under this option will be given the equivalent of transfer credits for all courses taken at MCC with a grade of 1.7 or higher. The student re-admitting under this option may obtain forms from the office of the Dean of Student Affairs, Lowe Building, room L287. The earlier grades and Grade Point Average will remain on the transcript, but all future calculations of GPA will only include courses taken after re-admission under the option. The Fresh Start Option may be used only once by the student and is subject to the existing residency requirement of 15 credits.

Enrollment and Withdrawal

Changes in Schedule, Program, Status

Change of Schedule: Students are permitted to add and drop courses during scheduled add and drop periods in the Registrars' Office.

Change of Major: Students who want to change their major should consult a member of the academic advising staff for the correct procedure. Prospective students who want to change their programs before registration should consult the Admissions Office.

Change of Status: Credit-free students may become degree students by applying for a change of status at the Admissions Office. An official application, a \$20 application fee, a high school transcript reflecting date

of graduation and, if applicable, proof of measles and rubella immunization are required. In addition, official transcripts from college(s) attended should be sent directly to the Admissions Office. A copy of a secondary equivalency certificate or general education diploma should be submitted if an individual has one of these instead of a high school diploma.

Withdrawal from Courses

- **Before two-thirds of the semester:** A student who withdraws from any course(s) must obtain a withdrawal form from the Registrar's Office, obtain the signature of the course instructor, and return the completed form to the Registrar. Grades for courses from which a student withdraws during the first two-thirds of the semester will be recorded as "W" at the end of the semester.
- **After two-thirds of the semester:** Instructors may record a "W" or an "F" in accordance with their written course outlines for students who:
 - a. present a withdrawal form for signature before the last day of class, or
 - b. discontinue regular class attendance, or
 - c. register for the course but do not attend.

The "W" or "F" will be recorded by the instructor at the end of the semester.

Withdrawal from the College

A student who withdraws from the College must complete a withdrawal form at the Registrar's Office. Failure to officially withdraw in writing from the College may result in failing grades for uncompleted courses. See above for procedures and deadline dates for withdrawing from a course.



Advanced Placement Program

Advanced placement may be granted to entering students on the basis of scores on the College Entrance Examination Board Advanced Placement Examination as follows: Scores of 3, 4 and 5 are granted degree credit for equivalent courses as determined by the academic divisions. All paperwork should be submitted to the Admissions Office. For questions referring to specific courses, please call the appropriate academic division.

Grades

Unit of Credit

A credit hour is the unit of credit students earn at MCC. One credit hour usually corresponds to one 50 minute class meeting each week for 15 weeks. A course worth three hours of credit, therefore, usually requires three 50 minute class meetings plus additional work outside the class each week.

Grades and Grade Points

Letter grades are assigned to inform students how well they have learned the material in their course(s). For each letter grade there is a corresponding number called grade points. These are used to get a numerical expression of a student's work. The table below shows the grades and their grade point equivalents.

Grades	Grade Points	Definition
A	= 4.0 grade points	outstanding
A-	= 3.7 grade points	
B+	= 3.3 grade points	above average
B	= 3.0 grade points	
B-	= 2.7 grade points	
C+	= 2.3 grade points	average
C	= 2.0 grade points	
C-	= 1.7 grade points	
D+	= 1.3 grade points	below average
D	= 1.0 grade points	
D-	= 0.7 grade points	
F	= 0.0 grade points	failure

The Grade Point Average (GPA) is computed by multiplying the point value of each grade earned by the number of semester hours of the course for which the grade is received and then dividing by the total number of hours of work attempted.

Grades	Grade point value	Attempted hours	Grade point hours
C+	= 2.3	x 3	= 6.9
D	= 1.0	x 3	= 3.0
A	= 4.0	x 4	= 16.0
F	= 0.0	x 3	= 0.0
B-	= 2.7	x 3	= 8.1
Total		16	34.0

$34.0 \text{ grade points} \div 16 \text{ attempted hours} = 2.125 \text{ GPA}$.

Reports of grades are issued at the end of the semester. Only those grades which are issued at the end of the semester are recorded on the student's permanent record.

Administrative Transcript Notations

AU (Audit) No college credit earned.

I (Incomplete) See this page.

M (Maintaining Progress) . Used only for developmental courses to indicate that the student is maintaining progress but not at the usual rate. It may be given to a student for a course only twice.

- N** (No Grade) Used for any situation where there is no grade reported at the end of the traditional semester.
- P** (Pass) Used for successful completion of courses taken on a pass/fail basis. Students failing will receive a grade of "F".
- TR** (Transfer) Used in place of grades for courses accepted for credit from other colleges and universities.
- W** (Withdrawal) See page 14.

Repeating a Course

No course may be repeated more than twice. The highest grade received will be used in calculating the student's academic average. This does not apply to those courses that are designed to be repeated for additional credit. A request for waiver of these standards shall be made to the Dean of Academic Affairs.

College transcripts will record all attempts at classes and the grades earned in each attempt. Students should note, that while MCC will not use repeated grades in calculating GPA, colleges to which they are applying for transfer may use a different method to make such a calculation.

Incomplete Grades

Granting of an Incomplete:

1. An Incomplete is a temporary grade assigned by the faculty member when coursework is missing and the student agrees to complete the requirements. Although a student may request an Incomplete, the faculty member is not required to honor the request. The faculty member should assign an Incomplete when there are extenuating circumstances such as illness that prevent a student from completing the assigned work on time and the student has completed most of the course requirements and, in the judgment of the faculty member, the student can complete the remaining work within the time limit established by system policy.
2. A faculty member who assigns an Incomplete shall file a system report form that includes:
 - (a) a brief description of the requirements to be completed;
 - (b) the date by which the coursework must be submitted to the faculty member, which is the end of the tenth week of the next standard semester;
 - (c) a statement that the Incomplete will change to a specified letter grade if the work is not completed by the end of the tenth week of the next standard semester.

The faculty member shall keep the original signed form, with copies to the student, the faculty member, the registrar, and the division directors.

3. All Incompletes must convert to a letter grade by the end of the following semester. If a student submits the required work on time, the faculty member shall calculate a grade to replace the Incomplete and submit it to the registrar by the end of the semester. If a student fails to complete or submit the required work by the specified time, or if the faculty member fails to submit a replacement grade, the registrar shall convert the Incomplete to the letter grade specified in the report form, and that letter grade shall be entered on the student transcript.
4. Students with an Incomplete are temporarily ineligible for semester or graduation honors. Upon conversion of the Incomplete to a letter grade, students may retroactively receive semester or graduation honors, and such recognition shall appear on the transcript, provided that the student has earned the required grade point average.

Academic Policies *continued*

Audit

This status allows students to participate in class activities without being required to meet the examination requirements of the course. A student who wishes to change from credit to audit status must request this from the Registrar's office within the first four weeks of the course. Full tuition and fees are charged for courses audited. Financial aid does **NOT COVER AUDITED CLASSES**.

Transcripts

Requests for official college transcripts must be made either by personally completing transcript request forms in the Registrar's Office or in writing to the Registrar. A transcript request form is available on line www.mcc.commnet.edu/registrar/. No telephone requests will be accepted. A charge of \$3 is required for each transcript issued.

Graduation Requirements

Degree and Certificate Students: Graduation is not automatic.

The Board of Trustees of Community-Technical Colleges, through Manchester Community College, is authorized by the Connecticut General Assembly to confer associate in arts, associate in science degrees, and award certificates to candidates who have met all requirements. The College also awards certificates upon successful completion of planned programs of study. See *General Education Component Checklist* on pages 29-30 as well as individual program requirements.

It is the student's responsibility to follow through EARLY and to meet all requirements listed below. If you have any questions, meet with your program coordinator or a counselor.

- follow the same catalog used when you originally enrolled.
- notify registrar if you are completing requirements at another college.
- submit official transcripts from other colleges to the Admissions Office for transfer of credit by application fee deadline date to insure participation. Exceptions for participation is subject to the approval of a review process outlined in *Late Applicants*.
- matriculation (enrollment in credit-bearing courses applicable to the requirements of a degree or certificate program).
- satisfactory completion of the total credits required in major (degree—minimum of 60 credits; certificate—15 credits).
- completion of course requirements with a minimum QPA of 2.0 or better. (*The College reserves the right not to recommend transfer students with a QPA lower than 2.5.*)
- satisfaction of all financial obligations (library, parking fines).
- completion of residency requirement for 25 percent of course work.
- submit an application and a non-refundable \$33.00 graduation fee for each degree or certificate by deadline date.
- file grades for all incompletes and approved course variances with the Registrar's office.

Application for Graduation (Degrees and Certificates):

GRADUATION IS NOT AUTOMATIC. Each student who expects to graduate must submit a separate application and \$33.00 non-refundable graduation fee for each degree or certificate earned, even if you do not plan on participating in commencement. The graduation application is available in campus literature racks, or from the Registrar, Counseling, Career, and Assistant to the Dean of Students offices. Students who will complete all academic work by December, 2003 must complete a graduation application for a degree and/or certificate by October 1, 2003. Students who will complete academic work by

May, 2004 must complete the application by March 1, 2004. Each student's application will be reviewed and the student's program of study will be checked and verified by the graduate auditor. If a student did not meet their graduation requirements, they need to reapply and pay a \$33.00 non-refundable re-application fee. Students are required to reapply each semester and pay an additional Graduation application fee of \$33.00 by the deadline dates, and the student's name will be placed on the following semester's graduation list. There will be only one commencement ceremony in the spring of each year. Regardless of graduation completion dates, all graduates are invited to attend Spring Commencement.

Students who wish to earn a SECOND DEGREE from Manchester Community College will be required to: complete a minimum of 15 credits beyond the number required for the initial degree, fulfill all requirements of the second degree, and pay a second graduation fee of \$33.00. The Registrar's Office will notify students in writing of the results of the evaluation/audit.

Late Applicants or Short 4 Credits:

1. Students that miss the March 2004 graduation deadline or are short four (or fewer) credits to graduate, may request special permission to participate in the ceremony. However, the student's name may not be printed in the program and their certificate/degree will not be ordered until the next cycle after all requirements have been met.

If approved, students may be permitted to take part in the graduation exercises, provided they are within a maximum of four (4) credits of completion of their degree requirements; these credits must be completed during the summer of that same year.
2. Students who file a Graduation Application after the March deadline will be considered on a case-by-case basis after submitting an appeal form with a detailed explanation and appearing before a review committee appointed by the Dean of Students.

Student Responsibilities

Attendance Policy

The faculty of Manchester Community College believe that regular and prompt attendance at classes is necessary for a student to benefit from the learning experience. Specific attendance requirements will be set by each individual instructor.

Academic Integrity

An academically honest student submits for evaluation only such work, including test performance, papers, reports, and other communication, ideas, or expression, that has been written, performed or formulated solely by that student. On those occasions when the stated rules of a course permit collaborative effort, the contributions of other individuals and sources should be appropriately acknowledged.

It is, at all times, the responsibility of the student to maintain conduct consistent with the concept and definition of academic integrity, including not only avoidance of plagiarism, but other actions further outlined under *College Policies* in the *MCC Student Handbook*.

Plagiarism

Webster's New Universal Unabridged Dictionary defines plagiarism as the act of taking someone else's idea, writing, or work, and passing it off as your own. If you fail to give credit to the source of the material, whether directly quoted or put in your own words, such a lack of credit constitutes plagiarism. Whether you take the material from the internet; from a book; from another student; or any other source, if you fail to give credit, you are stealing ideas; this is plagiarizing.

Plagiarism: 1) is a serious violation of academic standards and has serious academic consequences for the student, 2) may result in failure of the submitted work or failure for the course, at the discretion of the instructor, and 3) as an act of academic dishonesty, may result in additional disciplinary action by the College, as indicated in the *MCC Student Handbook, College Policies*, under the heading "Student Discipline," section 2, number 9: Academic Dishonesty.

Students Rights

Review of Academic Decisions

Students are evaluated and awarded credit based upon academic performance and without regard to personality, race, gender, religion, personal beliefs or on the basis of a previous complaint/grievance.

A student may request review of a grade or other decisions affecting academic status in accordance with the Board of Trustees' policies. (Complete texts of these policies are available in the office of the Dean of Student Affairs.) The informal procedure which follows is suggested as the way a student would begin.

A student who has an academic grievance may discuss it first with the instructor or staff person involved, with a counselor, or with an administrator (for example: division director, dean.) If this discussion does not resolve the matter, the student should discuss the complaint with the supervisor of the person towards whom it is directed.

Within 15 calendar days of the student's awareness of the academic decision, if a satisfactory resolution still has not been achieved, the student should proceed in accordance with the grievance procedure in the *Student Handbook* titled "Student Rights," Section 3: Review of Academic Standing. (A copy of the official text of "Review of Academic Standing" can be obtained from the office of the Dean of Student Affairs.)

Release of Personally Identifiable Student Records

The student's permission is required for the release of any information other than "directory information": name and address, dates of attendance, full- vs. part-time student status, and date of graduation. For the purposes of access by military recruiters only, telephone listings and, if known, age, level of education and major, are also designated as directory information. Students may request in writing that directory information concerning them not be released. (The only exception: information can be released to parents without student permission if the student is listed as a dependent on the parent's tax return.) A complete statement about this subject is available for inspection in the office of the Dean of Student Affairs.

Sexual Harassment Board Policy

Sexual harassment is a form of sex discrimination which is illegal under state and federal law and is also prohibited by the Board of Trustees' Non-discrimination Policy. This policy is available in the following offices: Center for Student Development, Personnel, Dean of Students, Academic Affairs, and Library.

Transfer Policies and Credit by Exam

Credit by Transfer (*Policy Statement from the Board of Trustees for Connecticut Community-Technical Colleges*)

Transfer into a Connecticut Community College:

At all regional community colleges, degree credit shall be granted for credit courses completed at all institutions within the Connecticut State System of Higher Education and at all other accredited collegiate institutions in accordance with the following:

1. Degree credit shall be granted for all credit courses which are applicable to the objectives of, or equivalent to the course requirements of, the curriculum in which the transferring student enrolls. Credit work which is not applicable or equivalent to curriculum requirements shall be accepted for credit at the discretion of the college. Degree credit shall also be granted on the basis of performance on examinations in accordance with standards and limits approved by the board of trustees.
2. Credit courses completed with a grade of "Pass" (P) shall be accepted only for degree credit; the "Pass" grade assigned by other institutions shall not be included in computation of grade point averages.
3. Degree credit shall be granted for credit courses completed with a passing letter grade of "C" or better. Such credit courses shall be accepted only for credit, and letter grades assigned by other institutions shall not be recorded or included in computations of student grade point averages.
4. At the option of a transfer student, degree credit shall be granted for credit courses completed at other institutions with a grade of "D," subject to the following conditions:
 - a. If the student's grade point average from the transferring institution at the time of transfer is at least 2.0, the student shall be considered in good academic standing, and letter grades assigned by other institutions to courses for which credit is granted by the community college shall not be recorded nor included in computations of the student's grade point average at the community college.
 - b. If the student's grade point average at the time of transfer is less than 2.0, then the letter grade of "D" assigned by another institution to each course for which credit is granted by the Community College shall be recorded on the student's transcript and included in computations of the student's grade point average, and the student's academic standing at the community college shall be determined accordingly.
5. Notwithstanding the number of degree credits which shall be granted in accordance with the foregoing, the student must complete at least 25 percent of the minimum credit requirements for the degree through coursework at the college awarding the degree.
6. When a student seeks transfer credit for technical specialty courses into an American Bureau of Engineering Technology-accredited program, such technical specialty credits should be from ABET-accredited programs. In the case of a request for transfer credit for technical specialty courses from a non-ABET-accredited program, the college shall provide appropriate means for the validation of the student's competency in the technical specialty course areas.

Transfer from a Connecticut Community College:

It is the policy of the Board of Trustees for the Connecticut State University that graduates of the regional community colleges in Connecticut shall be accepted for admission to the state universities, provided they have received either the associate in arts degree or the associate in science degree in transfer programs, and further provided they are recommended for admission by the President of the regional community college granting the degree. Community college graduates who meet these conditions will be given credit for two years of college work and will be treated exactly like students who have completed the sophomore year at a state university and are advanced to junior standing.

Transfer Opportunity: CSU Guaranteed Admissions Agreement

Transfer from a Connecticut Community College: It is the policy of the Boards of Trustees for the Community-Technical Colleges and the Boards of Trustees for the Connecticut State University that graduates of the regional com-

Academic Policies *continued*

munity colleges in Connecticut shall be guaranteed admission to the state university of their choice and shall be treated without disadvantage, vis-a-vis native CSU students, with respect to admission to specific majors, registration for courses, applicability of grades of different levels, assignment to Junior status, and degree program requirements.

In the case of majors for which articulation agreements have been adopted, College students preparing for transfer should follow the terms of the articulation agreement regarding course prerequisites, grade point averages, and other requirements stated in the agreement.

Where there is no articulation agreement, students are guaranteed junior status and a minimum of 60 transfer credits applied toward a baccalaureate degree at the Connecticut State University, provided that they meet the following conditions:

- Graduate from the Community College with an associate's degree
- Maintain a GPA of 2.0 or higher
- Enroll in a comparable university degree program, with no subsequent change of major
- Meet course or grade requirements, as specified for some majors.

Students are encouraged to follow the General Education Transfer Pattern specified by the CSU to maximize credit transfer (see the Community College system web page: <http://www.commnet.edu/co/academic/transfer/csu.htm>).

Transfer Compact with Eastern Connecticut State University

The Transfer Compact between Manchester Community College (MCC) and Eastern Connecticut State University (ECSU) is designed to provide special opportunities for students who transfer from MCC to ECSU. Specifically, the Compact is for students who will complete an associate degree in a program designed for transfer to ECSU. Participation in the Transfer Compact allows for:

1. Early identification of students interested in pursuing bachelor degrees;
2. Joint admission with Eastern upon successful completion of Eastern's admission requirements;
3. Smooth transition between institutions;
4. The acceptance of 60 credits minimum in transfer with an earned associate degree as stated in Connecticut State University/Connecticut Community College formal articulation agreement;
5. Personalized academic advisement by both MCC and ECSU advisors to ensure maximum transfer of credit to satisfy bachelor degree requirements.

Whether or not students enroll in the Transfer Compact, they are encouraged to plan their studies with eventual transfer in mind. However, the Admissions and Academic Advisement staff at both institutions will work closely with the Transfer Compact students to assist in a smooth, immediate transition from the Community College to the University. Students involved in the Compact will have ongoing contact with academic advisors from both institutions to ensure that appropriate coursework is completed and accepted upon transfer.

Joint Admission as a Benefit of Compact:

As a part of the Transfer Compact between MCC and ECSU, students enrolled at MCC in a designated transfer program are eligible to participate in the Transfer Compact program. At the beginning of their academic careers, students formally register at the Community College by completing a Transfer Compact Participation Form expressing interest in participating in the Compact and authorizing MCC and ECSU to share admissions information. Students participating in the Compact must submit the completed Participation Form and two fees: a \$20 application fee for admission payable to MCC, and

a \$40 admission fee payable to ECSU. Note that the admission fees are subject to change.

After applying to participate in the Compact at MCC, students will receive conditional acceptance to ECSU. The conditional acceptance stipulates that participants will complete an associate degree at MCC and will matriculate to ECSU within one semester of completion of the associate degree. Students participating in the Compact who wish to be considered for admission to ECSU prior to earning an associate degree at MCC must meet ECSU's requirements for admission to enroll at the University.

Awarding Transfer credit:

Students enrolling at ECSU as part of the Transfer Compact with an earned associate degree from MCC will receive no less than 60 credits in transfer. Students enrolling at ECSU prior to completing the associate degree will have their transcripts evaluated by ECSU personnel on a course-by-course basis in accordance with existing transfer credit guidelines.

Transfer Opportunity: University of Connecticut

(College of Liberal Arts and Sciences)

The Guaranteed Admissions Program is a transfer agreement between Manchester Community College and the University of Connecticut that guarantees admission to the University provided certain requirements are met. Incoming MCC students or students with up to 15 credits at MCC may enroll in this transfer program. A 2.5 minimum cumulative grade point average and an associate degree in either a Liberal Arts or General Studies transfer program are required in order to qualify under the terms of this agreement.

Upon completion of an associate degree students may then go on to the University and major in one of the 40 majors offered in UConn's College of Liberal Arts and Sciences. To complete the application process, contact the MCC Admissions Office. Former UConn degree seeking students are not eligible to participate in the GA Program.

College of Technology: Pathway Transfer Programs

Associate of science degree programs in engineering science, manufacturing engineering science, and industrial technology provide the pathways within the Connecticut College of Technology transfer programs into the University of Connecticut and the State University System Schools of Engineering and Engineering Technology.

Students may enter university engineering and technology programs through the MCC associate of science degree programs in engineering and technology, and upon successful completion of the programs, continue on at the University of Connecticut or the Connecticut State University System as third-year students with a full two years of credit towards a baccalaureate degree in engineering, engineering technology or industrial technology. MCC also provides the opportunity for students who complete the engineering and technology programs to transfer full credit to baccalaureate degree programs at other colleges and universities with which the College has transfer agreements. For more information, call Robert Fortier at 512-2623.

Credit by Examination

A student who has already studied the subject of a course offered by Manchester Community College may earn credit for the course by passing an examination which covers the material taught in the course.

Students wishing to gain credit for which a CLEP exam does not exist may take an exam, when available, which has been prepared by the MCC division offering the course (\$15 fee). Credit By Examination forms may be obtained from the Admissions Office or an academic division office.



Academic Information

Associate Degree Programs

Associate degree programs are intended primarily for students planning to transfer, in advanced standing, to colleges or universities where studies will be continued toward a bachelor's degree. Associate degree programs lead to an associate in science degree upon graduation. An exception is the Liberal Arts and Sciences Program that also offers, for a student who completes the foreign language requirement, an associate in arts degree. Because MCC is accredited by the New England Association of Schools and Colleges, credits earned in our courses can be transferred to colleges and universities all over the country. All associate degree programs are transfer programs.

Certificate Programs

Certificate programs are specialized curricula designed to equip students with the skills and educational background needed to get a job after graduation. Although certificate programs include course work that can be transferred, those programs are not intended specifically for the purpose of transfer. Each certificate career program represents a briefer, concentrated period of study in a specific discipline. A student who successfully completes the program receives a certificate of completion for the work.

Part-Time Studies

Almost all programs can be pursued part-time. The College has no minimum requirement for the number of courses for which a student must register. Courses are scheduled from 8 a.m. to 10 p.m. each day in order to provide students with a wide range of scheduling options. Many students complete our degree requirements in three or four years.

Double-Degree Program

An alternative to the customary single-degree program is the double-degree program which allows a student to combine two degrees at graduation. Application for the second degree is normally made after a student has completed 30 credits in the first program of study. A minimum of 15 additional credits is necessary for the second degree. Students wishing more information should speak with a counselor.

Computer Facilities

Manchester Community College students have access to personal computers throughout the campus, including: open computer laboratories with Windows and Macintosh micro computers, in the Library, in the College Learning Center, and in teaching labs.

Campus computers are connected to a Campus LAN (local area network) and the Community College System WAN (wide area network), which gives them access to the World Wide Web.

Cooperative Education and Work Experience Opportunities (860-512-3312)

At Manchester Community College, students have the opportunity to earn credit, pay and work experience through the Cooperative Education Program. Academic credit is awarded for cooperative education and work experiences under the supervision of selected faculty. Cooperative education and work experience opportunities allow students to bridge the gap between classroom theory and on-the-job training in an actual work environment.

Cooperative Education is available to students in the following programs of study:

Accounting; Administrative Assistant, Legal; Administrative Assistant, Medical; Administrative Assistant, Office; Business Administration; Child Development Associate; Communication; Computer Information Systems; Criminal Justice; Disabilities Specialist; Early Childhood Education; Food-service Management; General Studies; Gerontology; Graphic Design/Multimedia; Hospitality Management; Marketing; Paralegal; Social Service; Sport and Exercise Studies; Therapeutic Recreation

In some programs of study, Cooperative Education/Work Experience is a required course within the curriculum.

Enrollment Requirements:

Students must have a GPA (grade point average) of 2.0 or better, completed 12-15 credit hours towards a program of study, and received permission from the program coordinator and cooperative education director. Prior to registering for the course, students must: complete a "Statement of Understanding" form available at the Cooperative Education Office. During the semester students are required to attend a weekly, one-hour seminar in which work-related issues are addressed. The course is also offered on-line.

Placement:

For paid placements, students must complete a minimum of 300 hours of employment during one semester. Positions that provide monetary compensation are paid by the Cooperative Education employer. *There is no guarantee from the Cooperative Education Office that each student will receive a placement.* Unpaid internships are for 150 hours during a semester.

Academic Information *continued*

The Cooperative Education Office is located in the Lowe Building, room L-177. For more information and workshop dates, contact the Cooperative Education Office at 860-512-3312.

English as a Second Language at MCC (860-512-2678)

Manchester Community College offers the non-English speaker a variety of courses and levels of English classes to improve language proficiency in listening, speaking, reading, and writing. For more information on ESL classes at Manchester Community College, call Diana Hossain at 860-512-2678.

Honors Program (860-512-2669)

The Honors Program helps students demonstrate high levels of motivation and performance to prospective employers or transfer institutions. Students have a chance to investigate topics of interest, conduct research, work on special projects, and actively share in the learning process with other classmates and their teacher. Recognition of honors work will be designated on transcripts.

Honors options are listed beside the classes or sections where they are available. Students enroll for and meet all the requirements for a regular section of a class, but then meet with the instructor and develop an additional project which they complete for honors credit. Students have two weeks from the start of a class to decide if they will select the honors option.

Eligibility:

To qualify for the Honors Program, students must have completed 12 semester hours with a cumulative GPA (grade point average) of 3.4 or they may obtain a written faculty recommendation and permission of the course instructor. For more information, call Professor Patrick Sullivan at 860-512-2669.

International Studies (860-512-2753)

As part of their formal course work, students may elect to study abroad. A student may earn college credit in as short a period of time as three weeks. A full semester or a year abroad are also options for earning college credit. College credit may also be earned through independent study as a participant in selected MCC International Trips. MCC is a member of the College Consortium for International Studies. Contact Marcia Jehnings at 512-2753.

Library (860-512-3420)

The library is located in the newly designed Learning Resource Center. It holds over 50,000 volumes, has a strong reference collection, subscribes to approximately 500 periodicals, has substantial backfiles of periodicals in microform and on-line access to a wide range of databases and the Internet. An on-line catalog provides easy access to all library materials. The collection is directed toward supporting College programs of study and providing students with information and enrichment outside of course work.

Equipment for using audio-visual materials is available, as are computer workstations, coin-operated copy machines, and magnification devices to provide access to print materials.

The library houses an automated system which connects, on-line, to over 30 public and academic libraries in the Greater Hartford area and 24 multi-library systems throughout the United States. It is a member of the New England Library Network, with access to the books and periodicals owned by the major public and private academic libraries in the country through the On-line Computer Library Center (OCLC), a database of more than 12 million titles. Delivery of materials borrowed from other libraries in the state is made weekly.

Students are given both formal and informal instruction in library use. The library has printed and audiovisual materials to assist students in using its resources.



In addition, there are five group study rooms, as well as individual study carrels for student use.

Any state resident of high school age or older is welcome to register as a borrower at MCC's library.

Media Services (860-512-3456)

The Technology Help Desk facilitates a variety of media services, which include:

- Faculty and staff multi-media services, slide, video and audio tape duplication, overhead transparency, lamination services, etc.
- Faculty and staff media production coordination and assistance for projects and programmatic needs
- Media set-up services for classroom and conference needs
- Faculty, staff, and student software and A/V equipment checkout services
- Engineering and student mentoring for specialized media production spaces such as the Television Studio, Auditorium, sound stage/recording facilities, audio editing, and video non-linear and linear editing facilities

The College Copy Center is also available to facilitate faculty and staff duplication needs (860-512-3430, Learning Resource Center, room A251).

Mock Trial Program

MCC is home of a national mock trial program, and host of the American Mock Trial Association New England Qualifier Tournament. Competing against four-year colleges and universities, the MCC mock trial team has advanced to national tournaments for five consecutive years.

The MCC Mock Trial Program is an excellent opportunity for the student who is interested in the course system, and how it works. The student "mocks" learns to play key roles within the system. In her or his first class, the student is introduced to courtroom advocacy and etiquette, and to the Federal Rules of Evidence. The student then evolves into a lawyer or witness through repeated role-play and instruction. For further information, please call Donna Nicholson, 860-512-2756, or Bob Boland, 860-512-2626.

Pre-Law

MCC offers many courses of study for the pre-law student. Moreover, the mock trial program provides a unique opportunity for a student to start developing his or her courtroom skills. Advising, supported by the Northeast Association of Pre-Law Advisors, is available. For further information, please contact Bob Boland, 860-512-2626.

Student Affairs

The primary goal of the Student Affairs Division is to assist students in developing their potential, both personally and intellectually. Ideally, such development includes an enhanced ability towards: intellectual capacity and achievements; emotional, spiritual, and physical wellness; social interaction; vocational aptitudes and skills; moral values; global perspectives; economic resources; effective citizenship and esthetic response. While providing essential services in partnership with the academic mission of the institution, Student Affairs contributes significantly, directly and collaboratively, to the student's total education and development.

Learning Outcomes

Upon graduation from Manchester Community College, learners will:

1. Demonstrate an enhanced self-understanding and ability to function independently and responsibly.
 - decision making
 - goal/values clarification
 - abstract thinking
 - accountability (ethics)
2. Demonstrate an enhanced ability to function in socially and culturally diverse communities.
3. Demonstrate an enhanced ability to function in a team environment, respecting the individuality and collective responsibilities of the group.
4. Demonstrate an enhanced understanding of the significance and inter-connections of physical, spiritual and emotional wellness.

Activities and Services

Accident Insurance (860-512-3262 or 3203)

Enrolled students are carried automatically by group accident insurance while they are attending classes, or participating in and while traveling directly to or from an activity sponsored by the college. Students may purchase a 24-hour accident and sickness insurance through this policy. Students who wish to inquire about health insurance should contact the Health Services Office, Lowe Building, room L-101.

Alumni Association (860-512-2905)

The Alumni Association exists to promote and maintain an active interest in the College, to support its educational purposes, and to promote and maintain communications among alumni. A Board of Directors made up of alumni oversee fundraising and spending for the Association which is a 501 (c) (3) non-profit organization. Members do not have to be graduates to join. The Alumni Association annually funds scholarships and programs at MCC.

Art

Visual art, by professional artists and MCC students, is on display throughout the campus. The Newspace Gallery, located in the AST building, hosts monthly exhibitions of work by local, international, acclaimed and emerging artists.

Athletics (860-512-3353)

MCC began its organized intercollegiate athletics program in 1963. Today, the Athletic Department provides intercollegiate athletic programs for men in baseball, basketball, and soccer; and for women in basketball, soccer and softball. MCC student athletes have the opportunity to compete in an educa-

tional environment where intrinsic values such as sportsmanship, discipline, cooperation, and leadership are emphasized.

The College's athletic facilities include a fully equipped Fitness Center, a baseball field, softball field, soccer field, and the use of the gymnasiums at East Catholic High School and the Manchester Armory.

The MCC Fitness Center is run by the Athletic Department and offers seminars, fitness testing and personal exercise program planning. The Center is equipped with a stairmaster, treadmill, rowing machine, upper body exerciser, exercise bikes, universal machine stations and free weights. For more information about Fitness Center membership rates and hours of operation, please call (860-512-3355).

Manchester Community College is a Division III (non-scholarship) member of Region XXI in the National Junior College Athletic Association (NJCAA).



Campus Safety and Security (860-512-3680)

In accordance with Connecticut Public Act 90-259, *An Act Concerning Campus Safety*, Manchester Community College Uniform Campus Crime Report (UCCR) is available, upon request, in the library and the Campus Police Department.

Career Services (860-512-3372)

The Career Services Office provides comprehensive programs, activities and services designed to assist students at all levels of their education. Acquiring effective job search skills is a valuable part of the educational experience and students are encouraged to visit the Career Services Office to seek advice, support and information.

Services include regularly scheduled workshops on résumé and cover letter writing, job search skills and interviewing. Additionally, students can sharpen their job search skills by viewing the office's comprehensive video library. Some other services include information on summer employment/internship opportunities, alumni career panels, on-campus recruiting and job fairs. Finally, the office offers an internet-based job listing service that allows students to post résumés and search full-time, part-time, and volunteer positions. To learn more about upcoming events and resources, and to register for the online job listing service, go to: www.mcc.commnet.edu/career/.

Activities and Services *continued*

Center for Student Development

The Center for Student Development provides comprehensive, group and individualized services that foster intellectual and personal development.

The Center for Student Development is comprised of:

- Academic Advising Center
- College Learning Center
 - Computer Labs
 - Tutorial Assistance
- Counseling Center
- International Students
- Office of Minority Student Programs
- Office of Transitional Programs
 - Academic Success Program
 - Adults in Transition
 - Summer Training and Academic Retention Services
- Services for Students with Disabilities
 - Adaptive Services
- Women's Center

Academic Advising Center (860-512-3320)

The College offers comprehensive academic advising services for all new, returning and transfer students. Students have the opportunity to discuss their specific academic goals, placement test results, planned programs of study and degree/certificate program requirements with trained academic advisors/counselors. In addition to assisting students in establishing a solid academic foundation, the Academic Advising Center offers students early access to academic division directors, program coordinators, and faculty to provide appropriate academic mentorship. All students are encouraged to connect with advising services each semester of their college experience. Students may schedule appointments through the Advising Center or by contacting their faculty advisor.

Each semester returning students are encouraged to meet with a faculty advisor from their selected program during Advising Weeks. Advising Weeks begin each semester on the same day of returning student registration. A list of faculty members participating in Advising Weeks is posted in the Counseling Center, L133 and is available on the web at: www.mcc.commnet.edu/counseling/advising/facultylist.htm

New students are scheduled for placement testing and academic advising appointments prior to their first registration experience. Further, the Advising Center assists new students with their registration/course selection process, and conducts information sessions during New Student Orientation.

For more information on how the Academic Advising Center can benefit your academic and career plans, call 860-512-3320. Academic advising information is also available on the web at: www.mcc.commnet.edu/counseling/advising.htm

Adults in Transition (860-512-3344)

Adults in Transition (AIT) is a one semester program that provides support for women and men who are returning to school seeking a career change, because they have been laid off, or because their pursuit of further education was interrupted. The program was created to help students cope with the stress and changes involved in returning to school after a long absence.

AIT is open to students who plan to start their first semester at MCC (including students who are returning to MCC after a long absence). Students who enroll in MCC through AIT are provided with special services which include:

- an individualized interview to determine personal needs
- personalized academic advising and registration services
- a required one-credit study skills class which meets before the semester begins
- a required two-credit transition development course that introduces all aspects of the college and provides assistance in career and curriculum planning
- staff and peer support

Students will take one or more courses in their degree or certificate program or field of interest along with the AIT courses. The AIT program is offered in the daytime and evening.

Call 860-512-3344 for further information or to schedule an appointment for a personal interview.

College Learning Center (860-512-3303)

The College Learning Center (CLC) offers many opportunities for academic support to students of all ability levels. Individual or small group tutoring, subject-related review sessions, college survival skills workshops, and videos on strategies for succeeding in college are some of the services offered to students to enhance their understanding of classroom material. A variety of computers and basic training in Windows; Microsoft Word, Excel, PowerPoint, Access; and an Introduction to the Internet are available.

CLC staff is available to collaborate with instructors on specific activities to complement or supplement classroom instruction.

Tutorial Assistance:

Students may make day and/or evening appointments for coursework tutoring in the CLC (Lowe Building, room L-120) or by calling 860-512-3303. Information about all of the services offered by the College Learning Center is available at the CLC website: mcc.commnet.edu/clc/.

Counseling (860-512-3320)

A staff of professional counselors provide a comprehensive developmental counseling program designed to assist students with academic, vocational and personal issues. Counselors are available by simply calling the Counseling secretary (860-512-3320) to schedule an appointment. Limited walk-in services are also available.

Group sessions and workshops are provided throughout the year on a wide range of topics and issues related to goal setting, motivation, self-assurance, stress management, career planning and transfer. Counselors also offer credit courses dealing with career life planning and creating your college success.

Any student planning to transfer and continue their studies at another college is advised to schedule an appointment with a counselor by the end of their first year (or 30 credits) regarding transfer opportunities, admissions requirements and targeted course planning.

International Student Programs (860-512-3205)

The Office of Minority and International Student Programs is here to assist international students meet their academic, social and cultural needs while attending Manchester Community College. The Office provides information, programs and activities to increase cultural awareness within the college community and assists enrolled international students with academic opportunities that the College has to offer. International students speaking over seventy languages representing over fifty countries have attended MCC and many transfer on to four-year institutions to further their academic goals. International students interested in applying to MCC with an I20 application for F1 consideration must do so before May 23, 2003 for the Fall, 2003 semester and November 7, 2003 for the Spring 2004 semester. International students interested in attending MCC with an F1 visa should contact the Director of

Minority and International Student Programs for further information to ensure that the I20 application is processed in a timely manner for Immigration and Naturalization Service, or U.S. State Department approval. Application packets are also available in the Admissions Office, the Dean of Student Affairs Office, and the Center for Student Development. International students on a visa other than F1 may enroll for classes at MCC, but they should consult the Immigration and Naturalization Services office, or the Director of Minority and International Student Program to verify student eligibility.

Office of Minority Student Programs (860-512-3205)

The Office of Minority Student Programs is responsible for planning, promoting and implementing academic, social and cultural programs to meet the needs of MCC students. The programs are designed to address issues of multiculturalism and diversity. The Office provides a supportive environment for students of color by assisting them with academic and social support through programs, workshops, referrals and individual sessions. The Office of Minority Student Programs exists to provide educational and cultural programs that will increase the College's effort toward student access, retention and graduation. The Office also provides faculty and staff with information and activities related to issues of diversity. Its mission is to empower students to achieve academic excellence by taking pride in themselves and their heritage, and to meet the College's goals and objectives of providing a socially and culturally diverse environment. Students are encouraged to participate in program development and implementation, and they are highly encouraged to participate in the variety of events and activities that the Office provides at the College in order to produce a more culturally diverse learning environment.

Students are encouraged to visit, participate in programs, and to assist with the planning of programs designed to produce a more culturally diverse environment.

Office of Transitional Programs (860-512-3344)

The Office provides students with strategies to improve learning and study skills, and encourages students to become actively involved in the learning process. An intensive Academic Support Program (ASP), which is an early academic intervention program, is offered to help students succeed in the college environment.

The Office also offers an intensive six-week summer bridge program for incoming students called STARS (Summer Training and Academic Retention Service). Students must apply for the program during the spring and be eligible to receive financial aid or be a first generation college student. There is no cost for the program and students receive 4 credits for successfully completing the program. For more information, call 860-512-3344.

Services for Students with Disabilities (860-512-3332)

Support services at MCC are designed to provide access and to "even the playing field" for people with disabilities. Towards this end, we provide academic accommodations such as readers and scribes, testing accommodations, sign language interpreters, a mentoring program, priority registration, adaptive equipment and assistance in locating and acquiring services from community agencies.

A self-advocacy support group exists for students with learning disabilities. This group provides students the opportunity to share common interests and concerns, while working on coping strategies and study skills.

Individual services are consistent with Section 504 of the Rehabilitation Act of 1973 and The Americans With Disabilities Act. For more information, call 860-512-3332 or, for the Learning Disabilities Specialist, call 860-512-3325.

Women's Center (860-512-3344)

The Women's Center is temporarily located in the Lowe Building (Room L-125), and provides a friendly, open atmosphere for women of all ages to meet,



talk and study, as well as to exchange ideas and offer mutual support to one another. The Center's library has books, reference materials, periodicals and newsletters on a wide variety of subjects. The Women's Center offers information and referrals on many topics including health, sexual assault, battering, sexual harassment, legal issues, sexual orientation, and careers, as well as information on workshops and cultural events in the area.

A variety of workshops and programs are offered for students, faculty, staff, and the community on topics such as divorce, international issues, health, careers, violence against women, women and disabilities, lesbians, current events and other issues of sex equity. Events are publicized throughout the College.

Child Development Center (860-512-3272)

The Child Development Center is open 9:00 a.m.-4 p.m., Monday through Thursday and 9:00 a.m.-12 noon on Friday throughout the fall and spring semesters and operates on the same schedule as the College. The Child Development Center has been in operation since 1973. The experienced, professional staff provides a nationally accredited pre-school program in a warm, safe, supportive atmosphere. Some students in MCC's Early Childhood Education Program serve their internships in the Center with the guidance and support of the staff.

Children two years and nine months in September through five years of age are eligible to attend, with priority given to children of MCC students. Community residents may register children when space is available. Children may be registered for two, three or five half or full days to accommodate parents' school or work schedules. Parents should enroll their children as early as possible in the office of the director, since space is limited. Registration for spring begins in November; for the fall in April and May. A \$25.00 Application fee is required. A limited amount of financial assistance is available to eligible MCC students.

The pre-school program is designed to stimulate and challenge the curious, creative preschooler. The environment is carefully prepared with a wide variety of activities, both group and individual. These include art, music, language arts, cooking, natural science, creative movement, outdoor play, and the development of specific learning skills. Children must have 3rd birthday before January 1st to attend in any academic year. Kindergarten eligible children may not attend.

Convocation/New Student Orientation (860-512-3206)

When students participate in orientation programs, research supports that they increase their chances of academic success. Therefore, all new students, transfer students, and students who are returning to college after a long absence are expected to attend convocation and new student orientation. Most first year students find college life and class expectations complex, very confusing, and uncertain. Consequently, the program is designed to help ease your transition

Activities and Services *continued*

into the college, to give you basic information on how to be successful during your first year, to familiarize you with your classes, campus facilities, resources, and policies, and to equip you for the beginning of a very exciting, productive and positive experience. Parents, spouses, and families are also invited. Entering students will have ample opportunity to meet and interact with other students from different backgrounds and cultures, as well as faculty/staff and administrators who are as excited as you are about your educational goals. Orientation encompasses convocation, academic advising, workshops, and a guided campus tour. Program Coordinators, faculty and staff will be available to answer your questions. Orientation programs are held at the beginning of each semester. For more information regarding the date, time, and location of the next convocation and orientation program, please contact the Office of the Assistant to the Dean of Student Affairs, Lowe Building, room L-287.

Cultural Events (860-512-3216)

Throughout the year, the MCC Cultural Programs Committee, composed of students, faculty and staff, sponsors a wide variety of cultural programs. Musicians, authors, speakers, poets and actors appear on campus to present examples of the diversity and richness within our culture. Programs include dinner theatres, poetry readings, and professional dance performances.

Health Services (860-512-3262)

The Health Services Office is open to all members of the College community for emergency care, treatment of minor illness, referrals, medical excuses, accident reports, student insurance, and counseling about health-related matters. Health Services also sponsors clinics and seminars for students, staff members and residents of the community. Hours during which the College nurse is on duty are posted outside the Health Office, room L-101 in the Lowe Building.

Housing

Manchester Community College is a non-residential college. Students are responsible for their own housing arrangements.

Institute of Local History (860-512-2770)

The Institute of Local History stimulates interest in and spearheads projects related to the history of the region the College serves as well as more broadly based projects on Connecticut history. It performs as a service and resource center for local historical studies. Among its on-going projects are an oral history project for the town of Manchester, annual walking tour of the Cheney Brother's National Historic Landmark District, several non-credit courses and workshops and a permanent exhibition of historic photographs. It has also cooperated in the publication of two books about the history of Manchester.

Institute on Disability & Community Inclusion (860-512-2789)

Established in 1992, the MCC/Communitas Institute on Disability and Community Inclusion is a cooperative institute that works to eliminate negative attitudes toward children and adults with disabilities. The Institute conducts conferences, seminars and think tank sessions, and augments the book, journal, video and computer holdings of the MCC library. Visiting scholar programs, focused research projects, and visits by international leaders help to present new stories and research that will reduce fear and misunderstanding concerning the inclusion of children and adults with disabilities into everyday community life.

MCC Public Issues Institute

The purpose of the institute is to foster the community's participation in the development of public policy. This participation includes influencing public policy makers, reacting to emerging issues and problems and the personal and professional development of individuals who would like to be change agents. To fulfill this purpose, the institute will offer professional development



experiences, leadership training and a forum for public discussion.

Music (860-512-2674)

The MCC Vocal and Instrumental Ensembles give students the opportunity to develop their musical skills and to join others in presenting concerts on campus and in the community.

Student Activities

Committee (860-512-3292)

The Student Activities Committee is responsible for the coordination, planning and implementation of di-

verse programs at Manchester Community College. The committee, composed entirely of students, is funded by the Student Senate through the activities fee. Any student may become a member of this committee, which sponsors dances, concerts, speakers, coffee hours, special events, and travel programs each semester.

Membership on the Student Activities Committee provides a unique opportunity for the development of many leadership skills necessary for a fulfilling education. Through involvement, students develop practical leadership skills while providing a diverse co-curricular activities program in response to student needs. The Student Activities Committee is located in the Lowe Building, room L-154k.

Student Newspaper (860-512-3289)

Students are encouraged to contribute to the newspaper. Published four six times each semester, *The Live Wire* is a student newspaper focusing on MCC news and events. The staff welcomes volunteers who can write, edit, proof-read, take photographs or help with layout and ad design. Stop in the Live Wire office, located in the Lowe Building, room L-253.

Student Organizations and Clubs

Manchester Community College sponsors many clubs and organizations of an academic, social and professional nature (some are affiliated with their area and national counterparts): Afrocentric Student Organization, Alpha Mu Gamma, Arts Collective, Asian American Club, Association on Disability and Community Inclusion, Business Students Association, Chess Club, Criminal Justice Association, Cultural Programs Committee, Dance Club, Film Guild Association, Gay/Lesbian/Bisexual Alliance, Hispanic Cultural Club, Le Circle Français, The Live Wire (student newspaper), Mock Trial Club, Multicultural Club, Muslim Student Association, Occupational Therapy Assistant Club, Organization of Substance Abuse Counselors, Paralegal Association, Parents Club (Child Development Center), Phi Theta Kappa Honor Society, Photography Club, Science and Engineering Club, Spanish Club, Student Activities Committee, Student Senate, Supported Education Club, Upper Room Christian Fellowship Club, and the VOX Choral Club.

Student Senate (860-512-3292)

The Student Senate is a governing body of elected and nonelected students who represent the entire student body. Funds collected via the student activity fee are used by the Senate to sponsor various clubs, organizations, activities and services. As the official voice of the student body, the Senate has the power to regulate the activity fund, member organizations and to make decisions that affect all students. Anyone may attend monthly meetings of the Senate. However, one needs a GPA of 2.5 and to have earned at least three credits at MCC to become an executive officer. The office of the Student Senate is located in the Lowe Building, room L-108.

Continuing Education

The College's Continuing Education Division provides programs relevant to changing community needs and promotes the College as a focus of life-long learning. Each year more than 8,000 area residents become involved in credit and credit-free courses, seminars and workshops, as well as the many cultural activities and special educational services offered through this division. The Continuing Education Division Offices are located in the Learning Resource Center.

Business and Industry Services (860-512-2813)

As part of a collaborative effort of the state's 12 community colleges, the division provides businesses with training and educational services. It works closely with business and industry, as well as agencies and school districts, to provide both credit and credit-free, on-site instructional programs for employees. The College's Director of Business and Industry Services serves as a liaison to the business community. Popular training areas include technical skills, desktop publishing, presentation skills, basic skills, English as a second language, management and supervisory skills and total quality improvement.

Credit Courses (860-512-2800)

Special Sessions:

The Continuing Education Division administers Summer Session, Winter Intersession and off-campus courses. The Summer Session includes three-week, six-week, and eight-week day/evening courses that are offered from mid-May through July. Winter Intersession courses meet for a three-week period immediately after Christmas.

Weekend College:

The Weekend College offers a schedule of credit classes on Friday evenings, and/or Saturday mornings, and/or afternoons. Students may also earn an Office Microcomputer Certificate through the Weekend College. New classes begin every six weeks, for a total of seven sessions per year. Courses offered through the Weekend College are open to all students who meet prerequisite requirements.

Credit-Free Certificates (860-512-2800)

Credit-free certificate programs have been developed by faculty and area professionals to provide a strong foundation of practical and up-to-date information that can assist students in developing skills for their current jobs or for new careers. These programs are hands-on with a small student/teacher ratio and are taught by professionals in the field.

Current certificate programs include Precision Machining, Travel Careers, Real Estate, Bartending, Applied Foodservice Sanitation, PC Computer, Certified Nurse-Aide, and Emergency Medical Technician for those seeking to develop marketable job skills in those fields.

Credit-Free Courses (860-512-2800)

In addition to credit courses, the Continuing Education Division administers an extensive credit-free program. Each semester more than 300 credit-free courses are offered for career and personal development, cultural enrichment, and contemporary living. Most courses meet one or two evenings per week. A transcript can be issued upon written request and payment of a \$3 fee.

Excursions in Learning (860-512-2800)

Excursions in Learning is an enrichment program for children ages 4-14. Creative, high achieving students can explore the sciences, math, history, the arts, language arts, foreign languages and computers through hands-on, experiential learning. Special Saturday programs are offered in the spring semester. A two-week summer program will be offered July 28-August 8.

Grant and Training Funds

The Director of Business and Industry works with area companies to seek funding for custom training. In addition, through the Office of Institutional Development, grant funds are sought to support special projects, expand services to specific groups in the communities, and to allow the development of new curricula to meet changing technologies.

Off-Campus Sites (860-512-2800)

Off-campus courses are currently offered at South Windsor High School and the East Hartford Community Cultural Center. The course offerings are designed to meet the specific needs of the employees and residents of the area. The Division continually seeks to establish new off-campus sites to respond to business and community needs.

Older Adult Association (860-512-2800)

The MCC Older Adult Association (MCCOAA) is composed of adults 50 years of age or older who share common interests in educational and cultural opportunities. Short courses designed specifically for this age group are offered through the Continuing Education Division, and special social and cultural events are scheduled throughout the school year. While some Association members are students of the College, it is not a requirement for membership.

Publications (860-512-2800)

Brochures are published periodically by the Continuing Education Division to provide schedules of educational offerings and registration information. These are available at the Continuing Education Center, in the Learning Resource Center, room LRC B-147.

Registration (860-512-3220)

Registration for courses offered through the Continuing Education Division may be done in person, by fax or by mail. Registration by telephone is also available for credit-free courses only on a limited basis, 860-512-3332. Credit-free courses are open to everyone, regardless of educational background, on a "first-come, first-served" basis. Courses may be taken individually or as part of a planned program of study.

World Travel Expeditions (860-512-2800)

The goal of World Travel Expeditions is to foster cultural awareness and help students experience global connections by offering an expanding array of travel opportunities at an exceptional value. Most of the tours are fully-escorted by professional guides, as well as college faculty and/or staff. Short courses that explore history, art, architecture, language, politics and culture specific to trip destinations are routinely offered.



Online/Distance Education Courses

Our Distance Education program at Manchester Community College (MCC) offers an excellent opportunity for people in Connecticut and throughout the world to stay knowledgeable and competitive in today's global environment. Because MCC recognizes the importance of flexibility in a person's day-to-day life, we offer online courses that provide flexibility in time and geographic location.

The faculty at MCC are experienced educators and are especially known for providing individual guidance. They provide a relaxed electronic environment that encourages student-to-student interaction. Whether it is through discussions, chat, or role playing, the MCC faculty will be able to provide you with a rich and rewarding experience.

The primary online learning environment at MCC is WebCT, which offers MCC students a robust set of tools, functions, and features for learning online.

Federal financial aid may be available to you as an online student at MCC. Information is detailed in a brochure that is available from the MCC Financial Aid office (call 860-512-3380) or online at <http://www.ctdlc.org/Financialaid/index.html> through the Connecticut Distance Learning Consortium.

Textbooks for online courses may be purchased from the MCC campus bookstore. You may order books online from the bookstore by going to the website <http://www.efollett.com/>

Technical Requirements

While you are enrolled and taking an online course you will need to have access to an Internet connection (via cable modem, DSL, or at least a 56K modem connection), a web browser (Netscape 4.5x through 4.77 or Internet Explorer 5.0 or 5.5 with Service Pack 2), a word processor (Microsoft Word), and associated programs recommended by your instructor (for example, Excel, PowerPoint, or Minitab). You must have an active email account, and be familiar with sending and receiving e-mail. **IMPORTANT:** You should tell MCC your active email address either on your application form or through Banner Web for Students once you are a registered student.

The recommended minimum system configuration is a computer running either Windows (98 or higher) or MacOS (8.6 or higher) with at least 128 MB of RAM, at least 500 MB of free hard drive space, a CD-ROM drive, and a color monitor. A 3.5" floppy disk drive (or other removable media) is recommended. Some MCC instructors may use various web plug-ins such as Adobe's Acrobat Reader, Apple's QuickTime, Macromedia's Flash Shockwave, Real Network's RealPlayer, and/or Microsoft's Media Player throughout the course. Actual system and software requirements for a course may vary—please see the instructor's requirements listed in the class schedule or check with your instructor prior to beginning the course.

How the Online Learning Environment Works

The online learning environment at MCC is an electronic community consisting of electronic classrooms, information resources (libraries), counseling centers, bookstores, and a variety of opportunities to communicate and dialogue with MCC professionals in an academic setting. Here, you will engage in discussions with professors, classmates and colleagues, and collaborate on course work.

During the course, you will be doing a fair amount of reading, typing and reflecting on what others have written. In an on-campus classroom most communication involves talking and listening, with some reading and writing. In an online course, communication mostly occurs through reading and writing.



You will be communicating directly with fellow students and the instructor through email, discussion forums, and virtual chat. Class discussions will occur primarily through asynchronous discussion board messaging. You will read what your instructor and other class members have posted, write responses to readings or questions, and participate in text-based class discussions about the course material.

While you can expect deadlines for assignments, in general you have flexibility about when you actually do your class work, with the exception in some classes of virtual chats, which are scheduled events that occur at a particular time. You may be required to attend an informational orientation for your online course depending on your instructors' preferences. Please see the instructor's requirements listed in the class schedule for information about sessions you may need to attend on campus, if any.

On average, you can expect to spend an equivalent number of hours working on your online course as you would on a campus course, including the hours you would normally spend in the classroom.

This includes activities such as completing and submitting assignments, reading supplementary texts on coursework, accessing lectures and participating in class discussions.

For Information On:

- The WebCT classroom environment and general questions, call Cathy Manly at (860) 512-3442.
- A particular course, please contact the individual instructor.
- Federal Financial Aid, contact the Financial Aid Office at (860) 512-3380.

The following courses generally have sections that will be offered online during the academic year. To see what sections are offered in any given semester, students should refer to the MCC Class Schedule for that semester.

MCC Online Courses

ACCT 270	Cooperative Education/Work Experience	3
AH 270	Cooperative Education/Work Experience	3
BUS 214	Managerial Communications	3
BUS 270	Cooperative Education/Work Experience	3
BOT 241	Medical Terminology	3
BOT 270	Cooperative Education/Work Experience	3
COMM 270	Cooperative Education/Work Experience	3
CIS 111	Introduction to Computers	3
CIS 270	Cooperative Education/Work Experience	3
CST 114	Exploring the Internet	3
ENG 120	Introduction To Literature	3
ENG 252	Western World Literature II	3
FA 270	Cooperative Education/Work Experience	3
HIST 201	United States History I	3
HIST 202	United States History II	3
LEGL 270	Cooperative Education/Work Experience	3
MATH 208	Stats II: Methods/Applications	3
QM 110	Quantitative Methods for Bus	3
SOSC 270	Cooperative Education/Work Experience	3

Pre-Program Preparation

Pre-Program Preparation is designed for students who need special assistance in entering a regular program of study or who must complete specific courses or prerequisites. Students receive careful advice on course selection to ensure a smooth transition to a certificate or degree program. No degree or certificate is awarded for completion of pre-program preparation courses since the work is preparatory for entry into a regular degree or certificate granting program.

Pre-Allied Health Preparation (860-512-2728)

The Pre-Allied Health series of courses is designed to help students identify a specific allied health career choice as well as to academically prepare students for their choice. Students who have taken the college placement tests in math and English may select courses suited to level of ability from the list below. *All developmental course work must be completed prior to enrolling in a specific allied health program.* Other courses listed will help students with study skills.



Pre-Allied Health Preparation

AH 090	Allied Health Study Skills	0
AH 101	Introduction to Allied Health	1
BIO 112	Human Biology	4
CHEM 110	Elements of Chemistry	4
ENG 097*	Preparatory College Reading and Writing II	0
ENG 098*	Preparatory College Reading and Writing III	0
ENG 103	Reading Dynamics and Study Skills	3
MATH 098**	Mathematical Modeling I: Number Sense & Geometry	0
MATH 101**	Mathematical Modeling II: Algebraic Concepts	3
PSYC 120	Understanding Self and Others	3
SD 111	First Year Experience: Foundations for College Success	3

Candidates are encouraged to seek counseling before selecting courses. Students may contact the allied health counselor at 860-512-3320 or the coordinator of the desired health career program directly. For admission information and application to a specific health career program, including the admission selection criteria for that program, contact the Admissions Office at 860-512-3210 or the Health Careers Office at 860-512-2728.

* Based upon English placement test.

** For students who qualify, MATH 100 may be taken to satisfy the requirements for both MATH 098 and MATH 101 in a single semester.



Pre-Technical Education Preparation (860-512-2623)

Pre-Technical Education is designed to prepare students to meet requirements for acceptance into an engineering or technology program of study. Through successful completion of one or more of the following suggested courses, the candidate may be able to meet basic admission criteria (see specific engineering and technology programs). Students may be required to select courses from among the following list:

Pre-Technical Education Preparation

CHEM 110	Elements of Chemistry	4
CIS 098	Exploring the Computer	0
CIS 111	Introduction to Computers	3
ENG 097*	Preparatory College Reading and Writing II	0
ENG 098*	Preparatory College Reading and Writing III	0
ENG 103	Reading Dynamics and Study Skills	3
MATH 098**	Basic Mathematics	0
MATH 101**	Basic Algebra	3
MATH 102	Intermediate Algebra	3
MATH 110	Quantitative Literacy	3
MATH 150	Precalculus	4
PHYS 110	Elements of Physics	4

Candidates are encouraged to seek counseling before selecting courses. For more information contact the Center for Business and Technologies Division Office at 860-512-2623.

* Based upon English placement test.

** For students who qualify, MATH 100 may be taken to satisfy the requirements for both MATH 098 and MATH 101 in a single semester.

Degree Programs

General Education Component Checklist.....	29-30
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Associate Degrees

Accounting, A.S. Degree	31
Accounting and Business Administration Transfer, A.S. Degree	32
Administrative Assistant, Legal Option, Business Office Technology, A.S. Degree	33
Administrative Assistant, Medical Option, Business Office Technology, A.S. Degree	34
Administrative Assistant, Office Option, Business Office Technology, A.S. Degree	35
Biotechnology Option, Environmental Science, A.S. Degree	36
Business Administration Career, A.S. Degree	37
Clinical Laboratory Technology, A.S. Degree	38
<i>(formerly Medical Laboratory Technician)</i>	
Communication, A.S. Degree	39
Computer Engineering Technology, A.S. Degree	40
Computer Help Desk Technology, A.S. Degree	41
Computer Information Systems, A.S. Degree	42
Computer Network Technology, A.S. Degree	43
Computer Programming Technology, A.S. Degree	44
Computer Science, A.S. Degree	45
Computer Technology, A.S. Degree	46
Criminal Justice, A.S. Degree	47
Disability Specialist, A.S. Degree	48
Drug & Alcohol Rehabilitation Counselor, A.S. Degree	49
Early Childhood Education, A.S. Degree	50
Engineering Science, A.S. Degree	51
Environmental Science Technician, A.S. Degree	52
Foodservice Management, A.S. Degree	53
General Studies, A.S. Degree	54
Graphic Design, A.S. Degree	55
Hotel-Tourism Management, A.S. Degree	56
Industrial Technology, A.S. Degree	
Electronics Technology Option	57
Industrial Engineering Technology Option	57
Machine Tool Service Technology Option	57
Quality Assurance Technology Option	58
Tool, Die & Gage Maker Technology Option	58

Journalism Option, Communication, A.S. Degree	59
Liberal Arts and Science, A.A. Degree	60
Liberal Arts and Science, A.S. Degree	61
Liberal Arts and Science, A.S. Degree	
Biology	62
Chemistry	62
Environmental Science	62
Mathematics	62
Music	69
Physics	62
Liberal Arts and Science, A.A. Degree	
African/American Studies	62
Women's Studies	62
Management Information Systems Transfer Option, Accounting & Business Administration, A.S. Degree	63
Manufacturing Engineering Science, A.S. Degree	64
Marketing, A.S. Degree	65
Medical Laboratory Technician, A.S. Degree <i>(see Clinical Laboratory Technology)</i>	
Microcomputer Option, Computer Information Systems, A.S. Degree	66
Multimedia Option, Graphic Design, A.S. Degree	67
Multimedia Studies, A.A. Degree	68
Music Option, Liberal Arts and Science, A.S. Degree	69
Occupational Therapy Assistant, A.S. Degree	70
Paralegal, A.S. Degree	71
Physical Therapist Assistant, A.S. Degree	72
Respiratory Care, A.S. Degree	73
Social Service, A.S. Degree	74
Sport and Exercise Studies, A.S. Degree	75
Surgical Technology, A.S. Degree	76
Therapeutic Recreation, A.S. Degree	77
Visual Fine Arts, A.A. Degree	78

General Education Component Checklist

The general education component for associate degree programs shall include a balanced distribution of required courses or restricted electives in the humanities, arts, natural and physical sciences, mathematics, and social sciences, comprising at least one third of the minimum requirements for the degree.

Students should use this listing to keep track of their Gen Ed requirement.

Mode 1

Students must earn a minimum of 3 credits from the following list to meet the general education requirement for associate degree programs.

Arts Learning Outcomes

By studying arts, students will

1. Demonstrate analytical and problem solving skills by engaging in the creative process that is unique to music, theater and the visual arts.
2. Communicate and cultivate contextual understanding of art's relationship to society, history, and culture.
3. Demonstrate the ability to communicate one's understanding and knowledge with clarity and persuasively—orally, visually, and/or in writing.

- ☐ COMM 251: Computer Animation
- ☐ FA 101: History of Art I
- ☐ FA 102: History of Art II
- ☐ FA 105: History of 20th Century Art
- ☐ FA 106: Women in the Visual and Performing Arts
- ☐ FA 115: Introduction to Studio Art
- ☐ FA 121: Drawing I
- ☐ FA 125: Two Dimensional Design
- ☐ FA 126: Three Dimensional Design
- ☐ FA 127: Figure Drawing
- ☐ FA 131: Painting
- ☐ FA 137: Water Color
- ☐ FA 141: Printmaking
- ☐ FA 151: Sculpture
- ☐ FA 165: Ceramics
- ☐ FA 171: Film Study and Appreciation
- ☐ FA 176: Video/Filmmaking
- ☐ FA 201: Illustration I
- ☐ FA 205: Graphic Design I
- ☐ FA 210: Computer Graphics
- ☐ MUS 111: History & Appreciation of Music I
- ☐ MUS 112: History and Appreciation of Music II
- ☐ MUS 113: Today's Music: Jazz, Blues, Gospel, Country, Rock
- ☐ MUS 121: Chorus (2 credits)
- ☐ MUS 123: Chamber Music/Jazz Ensemble (2 credits)
- ☐ MUS 127: Vocal Ensemble: Madrigal (1 credit)

- ☐ MUS 131: Private Music Lessons (1 or 2 credits)
- ☐ MUS 215: Beginning Piano
- ☐ MUS 251: Music History I: The Classical Period
- ☐ PHOT 191: Photography I
- ☐ PHOT 210: Digital Photography
- ☐ THEA 111: Introduction to Theater
- ☐ THEA 115: Modern Dance I
- ☐ THEA 181: Acting

Mode 2

Students must take ENG 111 and earn 3 credits to meet the English Composition general education requirement for associate degree programs.

English Composition Learning Outcome

ENG 111: College Reading and Writing introduces students to the kinds of reading and writing that they will encounter in the academic world. The main thrust of this course is to enable students to write effective essays that sustain a clear focus and that effectively integrate material from outside readings.

By studying English composition, students will

1. Recognize that a successful essay contains a main idea, supporting information (both anecdotal and factual), a logical pattern of development, and the effective attribution of material from outside sources.
 2. Write non-narrative essays that have a clear focus and adequate support drawn from a group of thematically linked readings.
 3. Arrange the supporting details in a clear, logical pattern.
 4. Formulate sentences in an essay that demonstrate variety in length and emphasis.
 5. Obey the standard conventions of grammar and sentence structure.
- ☐ ENG 111: College Reading and Writing

Mode 3

Students must earn a minimum of 3 credits from the following list in order to meet the general education requirement for associate degree programs.

Humanities Learning Outcomes

The humanities are an expression of what humankind over the centuries has felt, thought, and created in the search for answers to questions about personal identity, origin, and the meaning of life. The humanities prepare students for a lifetime of inquiry, thereby enriching their own life experience now and in the future.

By studying humanities, students will

1. Engage effectively in creative or interpretive skills and processes.
2. Demonstrate the ability to discover larger patterns or relationships, discriminate among multiple views, and make connections to other times and peoples, their works, beliefs, and cultures.
3. Demonstrate the ability to communicate one's understanding and knowledge with clarity and persuasiveness—orally, visually, and/or in writing.

- ☐ COMM 171: Film Study and Appreciation
- ☐ COMM 213: Effective Speaking
- ☐ ENG 112: Reading and Writing for Academic Research
- ☐ ENG 116: ESL-Reading/Writing I
- ☐ ENG 117: ESL-Reading/Writing II
- ☐ ENG 120: Introduction to Literature
- ☐ ENG 220: Introduction to Contemporary Women Poets
- ☐ ENG 221: Creative Writing: Fiction
- ☐ ENG 222: Creative Writing: Poetry
- ☐ FREN 101: Elementary French I
- ☐ FREN 102: Elementary French II
- ☐ FREN 108: Elementary French I and II
- ☐ FREN 110: French Conversation
- ☐ FREN 125: French Culture and Civilization
- ☐ FREN 130: France Today
- ☐ FREN 201: Intermediate French I
- ☐ FREN 202: Intermediate French II
- ☐ FREN 251: Advanced French I
- ☐ FREN 252: Advanced French II
- ☐ HUMN 101: Introduction to the Humanities
- ☐ HUMN 201: Harlem Renaissance
- ☐ JPNS 101: Elementary Japanese I
- ☐ JPNS 102: Elementary Japanese II
- ☐ JPNS 201: Intermediate Japanese I
- ☐ JPNS 202: Intermediate Japanese II
- ☐ PHL* 101: Introduction to Philosophy
- ☐ PHL* 111: Ethics
- ☐ PHL* 131: Logic
- ☐ PHL* 151: World Religions
- ☐ PHL* 163: Chinese Philosophy
- ☐ PHL* 153: Buddhist Philosophy
- ☐ SPAN 101: Elementary Spanish I
- ☐ SPAN 102: Elementary Spanish II
- ☐ SPAN 108: Elementary Spanish I and II
- ☐ SPAN 125: Spanish Culture
- ☐ SPAN 130: Hispanic Culture
- ☐ SPAN 135: Mexican Culture
- ☐ SPAN 201: Intermediate Spanish I
- ☐ SPAN 202: Intermediate Spanish II
- ☐ SPAN 208: Intermediate Spanish I & II
- ☐ SPAN 251: Advanced Spanish I
- ☐ SPAN 252: Advanced Spanish II

General Education Component Checklist *(continued)*

Mode 4

Students must earn a minimum of 3 credits from the following list of courses in order to meet the general education requirement for associate degree programs.

Mathematics Learning Outcomes

Mathematics is a continuously evolving discipline that offers students an increased potential for understanding the world. Issues in diverse areas including medicine, business, science and the arts raise questions that require individuals to have a fundamental knowledge of mathematics. Mathematics enables the individual to make connections, use appropriate technology, formulate mathematical models to analyze real data, and to read and interpret quantitative information in order to make meaningful and appropriate decisions. In an ever-changing and increasingly global community, the mathematically literate citizen will possess the problem-solving, reasoning and communication skills that will enable him/her to grow and meet its demands.

By studying mathematics, students will

1. analyze and solve problems numerically, graphically, and symbolically.
2. use mathematical tools and technology, including calculators and computers, to create mathematical models of real-world situations.

- ☐ MATH 102: Mathematical Modeling III
- ☐ MATH 105: Trigonometry
- ☐ MATH 106: Elements of Modern Mathematics
- ☐ MATH 109: Geometry
- ☐ MATH 110: Quantitative Literacy
- ☐ MATH 111: Elementary Statistics with Computer Applications
- ☐ MATH 113: Structure of Mathematics I: Number Systems
- ☐ MATH 114: Structure of Mathematics II: Geometry
- ☐ MATH 115: Technical Mathematics I
- ☐ MATH 116: Technical Mathematics II
- ☐ MATH 120: Topics in Modern Mathematics I
- ☐ MATH 121: Topics in Modern Mathematics II
- ☐ MATH 135: Elementary Mathematical Models
- ☐ MATH 150: Precalculus
- ☐ MATH 188: Problems, Readings & Applications in Calculus
- ☐ MATH 189 : Problems, Readings & Applications in Calculus
- ☐ MATH 190: Analytic Geometry & Calculus I
- ☐ MATH 192: Analytic Geometry & Calculus II
- ☐ MATH 201: Differential Equations
- ☐ MATH 208: Statistics II
- ☐ MATH 220: Introduction to Linear Algebra
- ☐ MATH 250: Set Theory & Foundations
- ☐ MATH 293: Analytic Geometry & Calculus III

Mode 5

Students must earn a minimum of 3 credits from the following list of courses in order to meet the general education requirement for associate degree programs.

Natural & Physical Sciences Learning Outcomes

Natural and Physical Sciences include the study of all living and non-living matter and energy encountered upon and within the earth, planets and stars. Studying the natural and physical sciences improves students' understanding of biological, chemical and physical principles, and the methods of scientific inquiry. As a basis for life-long learning, students should understand the vocabulary of science and realize that while a set of principles has been developed through the work of previous scientists, ongoing scientific inquiry and new knowledge will bring changes in the ways scientists view the world.

By studying the natural and physical sciences, students will

1. Formulate approaches to problem solving that are based on the scientific method.
2. Apply scientific principles in demonstrating their understanding of natural phenomena.

- ☐ ASTR 110: Introduction to Astronomy
- ☐ ASTR 110L: Astronomy Lab
- ☐ BIO 100: Principles of Biological Science
- ☐ BIO 101: General Biology I
- ☐ BIO 102: General Biology II
- ☐ BIO 112: Human Biology
- ☐ BIO 121: General Zoology
- ☐ BIO 141: Microbiology
- ☐ BIO 152: Human Anatomy & Physiology I
- ☐ BIO 153: Human Anatomy & Physiology II
- ☐ BIO 260: Genetics
- ☐ CHEM 110: Elements of Chemistry
- ☐ CHEM 111: College Chemistry I
- ☐ CHEM 112: College Chemistry II
- ☐ CHEM 201: Principles of Organic Chemistry
- ☐ CHEM 211: Organic Chemistry I
- ☐ CHEM 212: Organic Chemistry II
- ☐ ERSC 110: Introduction to Earth Science
- ☐ EVSC 100: Introduction to Environmental Science
- ☐ GEOL 110: Introduction to Physical Geology
- ☐ MTEO 110: Introduction to Meteorology
- ☐ OCEN 110: Introduction to Oceanography
- ☐ PHSC 100: Principles of Physical Science
- ☐ PHYS 110: Elements of Physics
- ☐ PHYS 111: Physics & the Human Body
- ☐ PHYS 121: General Physics I
- ☐ PHYS 122: General Physics II
- ☐ PHYS 131: University Physics I
- ☐ PHYS 132: University Physics II

Mode 6

Students must earn a minimum of 3 credits from the following list of courses in order to meet the general education requirement for associate degree programs.

Social Sciences Learning Outcomes

The social sciences are those academic disciplines that deal with aspects of human society. Although different in their approaches, paradigms, and perspectives, the social sciences share a concern for the study of human individuals and their thoughts, emotions and behavior. Adhering to the principles of the scientific method, they seek to describe, analyze and interpret individual and collective behavior.

By studying the social sciences, students will

1. Demonstrate an awareness of diversity.
2. Demonstrate an understanding of individual and group behavior in various settings.
3. Examine the impact of social structure in individual and collective behavior.
4. Demonstrate an understanding for world events.
5. Demonstrate an understanding of the fundamentals of research.

- ☐ ANTH 101: Introduction to Anthropology
- ☐ ANTH 150: Cross Cultural Issues
- ☐ ECON 101: Macroeconomics
- ☐ ECON 102: Microeconomics
- ☐ GEO* 101: Introduction to Geography
- ☐ GEO* 202: A Geography of the United States and Canada
- ☐ GEO* 111: World Regional Geography
- ☐ HIST 101: Western Civilization I
- ☐ HIST 102: Western Civilization II
- ☐ HIST 201: United States History I
- ☐ HIST 202: United States History II
- ☐ HIST 121: World Civilization I
- ☐ HIST 122: World Civilization II
- ☐ POL* 101: Introduction to Political Science
- ☐ POL* 103: Introduction to International Relations
- ☐ POL* 111: American Government
- ☐ POL* 112: State and Local Government
- ☐ PSYC 111: General Psychology
- ☐ PSYC 112: Advanced General Psychology
- ☐ PSYC 240: Organizational Behavior
- ☐ SOC 101: Introduction to Sociology

Accounting, A.S. Degree

Program Design

The Accounting associate degree program prepares students for employment as junior accountants, bookkeepers, and accounts receivable/payable and payroll associates. Graduates will be able to maintain complete sets of accounting records and prepare financial statements and individual tax returns. Students have the opportunity to participate in MCC's Volunteer Income Tax Assistance (VITA) program, in which they gain practical experience in the preparation of tax returns. Students interested in transferring to earn a bachelor's degree should enroll in the Accounting and Business Administration Transfer, A.S. Degree Program.

Curriculum

Students may enroll full- or part-time. Since some courses are not offered in both the fall and spring semesters, see an advisor about your schedule. Students must achieve at least a C- or better in an accounting course to continue on to the next level. *Note: All business courses 100 or higher require students to be eligible for ENG 111 except BUS 111. All accounting courses numbered 100 or higher require students to be eligible for ENG 111 and MATH 101 or higher.*

Accounting Requirements

ACCT 101	Financial Accounting	4
BUS 101	Business Law I	3
BUS 111	Business Environment	3
Gen Ed	ENG 111: College Reading and Writing	3
QM 110	Quantitative Methods for Business Careers	3

Subtotal: 16

ACCT 102	Managerial Accounting	4
BUS 102	Business Law II	3
CIS 106	Windows	2
ACCT 105	Accounting & Business Applications Software	3
Gen Ed	ECON 102: Microeconomics	3
Gen Ed	Humanities or Social Science	3

Subtotal: 18

ACCT 201	Intermediate Accounting I	4
ACCT 223	Federal Taxes	3
BUS 214	Managerial Communications or	
ACCT 270 [†]	Cooperative Education/Work Experience	3
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3
Gen Ed	MATH 110: Quantitative Literacy	3

Subtotal: 16

ACCT 202	Intermediate Accounting II	4
ACCT 213	Cost Accounting or	
ACCT 251 ^{##}	Non-Profit Accountants	3
FNCE 241	Corporation Finance	4
Gen Ed	Mode 1	3
Gen Ed	Mode 5	3-4

Subtotal: 17-18

Total Credits Required: 67-68

Learning Outcomes

Upon successful completion of all Accounting degree program requirements, graduates will

1. Demonstrate mastery of generally accepted accounting principles and their manual and computerized spreadsheet applications to all phases of the accounting cycle.
2. Complete relatively complex accounting problems and be familiar with current financial accounting standards and practices.
3. Prepare complete financial statements for sole proprietorships, partnerships and corporations in compliance with current accounting standards and practices.
4. Prepare the 1040 tax return and supporting schedules under simulated conditions.
5. Explain how budgeting, activity-based costing and strategic cost management foster the effective use of resources and help an organization accomplish its goals.
6. Demonstrate computer competencies for maximum efficiency including the use of accounting, spreadsheet and presentation software. Use the Internet for business purposes, including research, marketing, and stock market analysis.
7. Understand and discuss financial issues dealing with the environment of managerial finance; including working capital management, short-term financing, capital markets, and the theory of the value of the firm (risk, leverage, cost of capital).
8. Generally understand our legal system and be able to apply principles of contract law, sales law under Article II of the Uniform Commercial Code, and the law of agency to business situations.
9. Successfully enter the marketplace in the field of accounting.
10. Demonstrate proficiencies in reading, writing, listening, presentation and analytical skills.
11. Work with others, including culturally and intellectually diverse people; think critically; and gain an appreciation for life-long learning.
12. Rationalize and present solutions to problems using accounting knowledge and knowledge from social sciences, arts, literature, mathematics and science.
13. Develop sound ethical, philosophical and moral professional characteristics.
14. Demonstrate a responsible attitude in relationships with employers, peers and toward the working environment.
15. Demonstrate an understanding of how the United States economic system is organized, how it functions and how it impacts the global economy.
16. Demonstrate an understanding of the interrelationships between accounting and all other areas within a business including working with other departments to achieve overall strategic goals.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] ACCT 270 is offered as an option for students who have a GPA of at least 2.0 and 15 credits completed towards their degrees, including ACCT 101, 102 and 201. Permission of Cooperative Education Director is required.

^{##} Students who are interested in a manufacturing environment should take Cost Accounting. Students who want to do local, state, federal, hospital, fund-raising, or college or university accounting should take Non-Profit Accounting.

See page 104 for common course numbering information.

Accounting and Business Administration Transfer, A.S. Degree

Program Design

The Accounting and Business Administration Transfer associate degree program is designed for students who plan to earn a bachelor's degree in accounting, business administration or marketing. This program provides a broad liberal arts background consisting mostly of courses normally taken in the first two years at a baccalaureate college or university. In addition, students will take courses in accounting and business administration. Advanced courses should be taken at the institution to which you transfer.

Students should be familiar with the requirements of the institutions to which they will transfer. Therefore, we encourage selection of transfer institutions as early as possible. Students should see an advisor before choosing elective courses because each transfer institution may have specific requirements.

Curriculum

We recommend that students have a sound foundation in mathematics before entering this program. Take the assessment test early to determine your level of mathematical ability. *Note: To take a business course numbered 100 or higher, students must be eligible for ENG 111. To take an accounting course numbered 100 or higher, students must be eligible for ENG 111 and MATH 101 or higher.*

Accounting & Business Administration Requirements

ACCT 101	Financial Accounting	4
BUS 101	Business Law I	3
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	PSYC 111: General Psychology	3
Gen Ed	Mode 5	3-4

Subtotal: 16-17

ACCT 102	Managerial Accounting	4
ECON 101	Macroeconomics	3
Gen Ed	ENG 120: Introduction to Literature	3
Gen Ed	MATH 111: Elementary Statistics with Computer Applications	4
BUS 214 [†]	Managerial Communications <u>or</u>	
PSYC 112	Advanced General Psychology	3

Subtotal: 17

BUS 121	Principles and Methods of Marketing I	3
Gen Ed	ECON 102: Microeconomics	3
CIS 111 [†]	Introduction to Computers <u>or</u>	
Elective	Social Science	3
MATH 120	Topics in Modern Mathematics I: Functions, Graphs, Matrices	3
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3

Subtotal: 15

BUS 201	Business Management	3
FNCE 241	Corporation Finance	4
MATH 121	Topics of Modern Mathematics II: Applied Calculus	3
BUS 102	Business Law II	3
Gen Ed	Mode 1	3

Subtotal: 16

Total Credits Required: 64-65

Learning Outcomes

Upon successful completion of all Accounting and Business Administration Transfer degree program requirements, graduates will

1. Transfer to a four-year college or university and obtain junior status in the school of business.
2. Prepare and interpret financial statements and utilize accounting for managerial decisions.
3. Understand and discuss financial issues dealing with the environment of managerial finance, including working capital management, short-term financing, capital markets, and the theory of the value of the firm (risk, leverage, cost of capital).
4. Explain how budgeting, activity-based costing and strategic cost management foster the effective use of resources and help an organization accomplish its goals.
5. Generally understand our legal system and be able to apply principles of contract law, sales law under Article II of the Uniform Commercial Code, and the law of agency to business situations.
6. Analyze principles, techniques, and the major functions (planning, organizing, lending and controlling) of business enterprise management.
7. Demonstrate an understanding of marketing methods and institutions, including analysis and interrelationship of the marketing mix.
8. Apply basic marketing and management strategic planning methods and performance computations related to marketing efficiency.
9. Demonstrate mathematical skills in topics including functions, graphs, matrices, applied calculus, and statistics with computer applications.
10. Demonstrate computer skills appropriate to his/her focus area including word processing, electronic spreadsheets, Internet browser, database management, general ledger accounting systems, and presentation software.
11. Use the Internet for business purposes, including research, marketing, and stock market analyses.
12. Work with others, including culturally and intellectually diverse peoples; think critically; and gain an appreciation for life-long learning.
13. Demonstrate a responsible attitude in relationships with others.
14. Demonstrate an understanding of how the United States economic system is organized, how it functions and how it impacts the global economy.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] Students planning to attend UConn should take PSYC 112 and another social science elective.

See page 104 for common course numbering information.

Administrative Assistant, Legal Option, Business Office Technology, A.S. Degree

Program Design

The Administrative Assistant, Legal Option, Business Office Technology associate degree provides students with a broad understanding of the court systems and the many fields of law. Students become proficient in keyboarding, word processing, legal terminology and legal transcription, office communication skills, integrated office systems, and office procedures. Students are encouraged to develop individual areas of interest through elective courses and through part-time and summer employment.

Legal administrative assistants use technology to originate, access, manage and manipulate information. In addition they may function independently in initiating office communications, accessing and tracking records and information, and problem solving the various details of the day-to-day office operations. They participate in the representation of and communication with clients and in the preparation of court papers, legal documents and correspondence.

Curriculum

Students may enroll in this program full- or part-time.

Business Office Technology Requirements

BOT 103	Office Writing Procedures	3
BOT 107	Beginning Keyboarding	3
CIS 106	Windows	2
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	PSYC 240: Organizational Behavior	3
Gen Ed	MATH 110: Quantitative Literacy	3

Subtotal: 17

BOT 108	Advanced Keyboarding	3
BOT 117 [†]	Skill Building	1
BOT 124	Microsoft Word for Windows	3
BOT 224	Office Accounting <u>or</u>	
ACCT 101	Financial Accounting	3-4
BOT 233	Legal Terminology: Forms & Documents	3
Gen Ed	ENG 112: Advanced Composition	3

Subtotal: 16-17

BOT 118 [†]	Skill Building	1
BOT 130	Microsoft Office Suite	3
BOT 222	Office Procedures	3
BOT 234	Legal Terminology & Transcription	3
BOT 261	Document Creation and Management	3
Gen Ed	Mode 1	3

Subtotal: 16

BOT 109	Machine Transcription	3
BOT 262	The Integrated Office	3
ENG 114	Technical Writing <u>or</u>	
ENG 203/BOT 203	Proofreading & Editing	3
Gen Ed	Mode 3	3
Gen Ed	Mode 5	3-4

Subtotal: 15-16

Total Credits Required: 64-66

Learning Outcomes

Upon successful completion of all Administrative Assistant—Legal, BOT degree program requirements, graduates will

1. Read, understand and prepare standard types of business communications.
2. Demonstrate appropriate interpersonal, human relations skills.
3. Use appropriate business office procedures.
4. Understand and perform office accounting tasks.
5. Demonstrate the use of legal terminology in preparing forms, documents, and transcribed material.
6. Possess appropriate skills in the following software: operating system, word processing, electronic spreadsheet, database management, integrating office applications, and presentation graphics.
7. Demonstrate speed and accuracy in keyboarding skills.
8. Understand the importance of confidentiality in dealing with legal matters.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

Note: Students may elect to substitute BOT 270 Cooperative Education/Work Experience for any equivalent BOT credit course with prior departmental approval.

[†] May not be required based on proficiency.

See page 104 for common course numbering information.

Administrative Assistant, Medical Option, Business Office Technology, A.S. Degree

Program Design

The Administrative Assistant, Medical Option, Business Office Technology associate degree provides students with the skills necessary to excel in the medical office environment. Students become proficient in keyboarding, word processing, medical terminology and medical transcription, office communication skills, integrated office systems, and medical office billing procedures and record keeping. Sociology, psychology and biology courses are also included in this program.

Curriculum

Students may enroll in this program full- or part-time.

Business Office Technology Requirements

BOT 103	Office Writing Procedures	3
BOT 107	Beginning Keyboarding	3
BOT 241	Medical Terminology	3
CIS 106	Windows	2
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	MATH 110: Quantitative Literacy	3

Subtotal: 17

BOT 108	Advanced Keyboarding	3
BOT 124	Microsoft Word for Windows	3
BOT 210	Medical Machine Transcription	3
BOT 224	Office Accounting <u>or</u>	
ACCT 101	Financial Accounting	3-4
Gen Ed	ENG 112 : Advanced Composition <u>or</u>	
	COMM 213/SPCH 213: Effective Speaking	3

Subtotal: 15-16

BOT 130	Microsoft Office Suite Applications	3
BOT 140	Medical Coding I	3
BOT 222	Office Procedures	3
BOT 117*	Skill Building	1
Gen Ed	BIO 112: Human Biology	4
Gen Ed	SOC 101: Introduction to Sociology	3

Subtotal: 17

BOT 141	Medical Coding II	3
BOT 142	Foundations/Management of Medical Insurance	3
BOT 143	Computer Applications in the Medical Office	3
ENG 114	Technical Writing <u>or</u>	
ENG 203/BOT 203	Proofreading & Editing	3
Gen Ed	Mode 3	3
Gen Ed	Mode 1	3

Subtotal: 18

Total Credits Required: 66-67

Learning Outcomes

Upon successful completion of all Administrative Assistant—Medical, BOT Degree program requirements, graduates will

1. Read, understand, and prepare standard types of business communications.
2. Demonstrate appropriate interpersonal, human relations skills.
3. Use appropriate business office procedures.
4. Understand and perform office accounting tasks.
5. Demonstrate the use of medical terminology.
6. Demonstrate correct billing and medical coding procedures.
7. Possess appropriate skills in the following software: operating system, word processing, electronic spreadsheet, database management, integrating office applications, and presentation graphics.
8. Demonstrate speed and accuracy in keyboarding skills.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

Note: Students may elect to substitute BOT 270: Cooperative Education/Work Experience for any equivalent BOT credit course with prior departmental approval.

* May not be required based on proficiency.

See page 104 for common course numbering information.

Administrative Assistant, Office Option, Business Office Technology, A.S. Degree

Program Design

The Administrative Assistant, Office Option, Business Office Technology associate degree provides students with the skills necessary to excel in the office environment. Students become proficient in keyboarding, word processing, office communications skills, integrated office systems, and office procedures. Students are encouraged to develop individual areas of interest through elective courses and through part-time and summer employment.

Administrative assistants use technology to originate, access, manage and manipulate information. In addition they function independently in initiating office communications, accessing and tracking records and information, and problem solving the various details of the day-to-day office operations. As members of management teams, they are able to assume responsibility and work independently to exercise initiative and judgment and to adapt to new concepts and products.

Curriculum

Students may enroll in this program full- or part-time.

Business Office Technology Requirements

BOT 103	Office Writing Procedures	3
BOT 107	Beginning Keyboarding	3
CIS 106	Windows	2
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	PSYC 240: Organizational Behavior	3
Gen Ed	MATH 110: Quantitative Literacy	3

Subtotal: 17

BOT 108	Advanced Keyboarding	3
BOT 124	Microsoft Word for Windows	3
BOT 224	Office Accounting or	
ACCT 101	Financial Accounting	3-4
BOT 109	Machine Transcription	3
BOT 117 [‡]	Skill Building	1
Gen Ed	ENG 112: Advanced Composition or	
	COMM 213/SPCH 213: Effective Speaking	3

Subtotal: 16-17

BOT 118 [‡]	Skill Building	1
BOT 130	Microsoft Office Suite	3
BOT 222	Administrative Office Procedures	3
BOT 261	Document Creation and Management	3
GEO* 204	Geography and Tourism	3
Gen Ed	Mode 5	3-4

Subtotal: 16-17

BUS 101	Business Law I or	
BUS 214	Managerial Communications	3
ENG 114	Technical Writing or	
ENG/BOT 203	Proofreading and Editing	3
BOT 262	The Integrated Office	3
Gen Ed	Mode 1	3
Gen Ed	Mode 3	3

Subtotal: 15

Total Credits Required: 64-66

Learning Outcomes

Upon successful completion of all Administrative Assistant, Office—BOT degree program requirements, graduates will

1. Read, understand, and prepare standard types of business communications.
2. Demonstrate appropriate interpersonal, human relations skills.
3. Use appropriate business office procedures.
4. Understand and perform office accounting tasks.
5. Possess appropriate skills in the following software: operating system, word processing, electronic spreadsheet, database management, integrating office applications, and presentation graphics.
6. Demonstrate speed and accuracy in keyboarding skills.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

Note: Students may elect to substitute BOT 270 Cooperative Education/Work Experience for any equivalent BOT credit course with prior departmental approval.

[‡] May not be required based on proficiency.

See page 104 for common course numbering information.

Biotechnology Option

Environmental Science, A.S. Degree

Program Design

The Biotechnology Option leads to an A.S. degree in Environmental Science. The program is designed to prepare students to join the growing biotechnology sector at the level of technician. Biotechnology is the manipulation of living organisms and/or biological processes to provide useful products. Students who complete this option may wish to further their education or seek employment as technicians in the pharmaceutical, agricultural or environmental industries. Students should not confuse this program with the Liberal Arts and Science, A.S. Degree Suggested Course Sequence.

The program is offered through a collaborative arrangement between Middlesex Community College and Manchester Community College. The A.S. degree is awarded by Middlesex Community College. The two year program will normally begin in the fall semester and will include a minimum of 62 credits in science, mathematics, social sciences and humanities. The applied courses in biotechnology techniques will be conducted at Middlesex Community College on transfer to that college. There is also the opportunity to carry out an internship with biotechnology companies located in the state.

Due to the agreement between Middlesex Community College and Manchester Community College, all designated courses taken at Manchester will transfer to Middlesex, provided a grade of "C" has been obtained.

For further information on this option please contact the Biotechnology Coordinator at Middlesex Community College, Jon Morris 860-343-5880 or Philip Jones at Manchester Community College 860-512-2727.

Biotechnology Option Requirements

BIO 101	General Biology I	4
CHEM 111	College Chemistry I	4
ENG 111	College Reading and Writing	3
MATH 102	Mathematical Modeling III	3
CIS 111	Introduction to Computers <u>or</u>	
BOT 130	Microsoft Office Suite Applications	3

Subtotal: 17

BIO 141	Microbiology	4
CHEM 104 [†]	Introduction to Biochemistry	4
CHEM 112	College Chemistry II	4
ENG 114	Technical Writing <u>or</u>	
COMM 213	Effective Speaking	3

Subtotal: 15

BIO 203 [†]	Topics in Genetics	3
BIO 206 [†]	Molecular Biology	4
MATH 111	Elementary Statistics with Computer Applications	4
Elective	Social Science	3
Elective		3

Subtotal: 17

BIO 299 [†]	Biotechnology Internship	3
CHEM 270L [†]	Topics in Chemical Instrumentation	4
Elective		3
Elective		3

Subtotal: 13

Total Credits Required: 62

Learning Outcomes

Successful graduates will have gained the following skills and knowledge, which will provide them with the flexibility to quickly adapt to a variety of employment or educational options in biotechnology and science.

Upon successful completion of all program requirements, graduates will

1. Students will know how to conduct themselves, as lab technicians in a biotechnology laboratory with the basic skills and knowledge required to function effectively in a research setting.
2. Demonstrate proficiencies in both basic and advanced principles of chemistry and biology that are required by a person working as a lab technician or planning to enter into a four-year college science program.
3. Write clear precise technical reports that document and analyses their work in a laboratory setting.
4. Demonstrate the basics of Good Laboratory Practices (GLP).
5. Describe the culture found within the scientific community and what is expected of persons employed in a research laboratory.
6. Keep a proper notebook required in a research setting.
7. know the basic principle of genetics, molecular biology, cell biology, chemistry, biochemistry, and microbiology.
8. Employ sterile technique in the handling of bacterial cultures with knowledge of what is safe and what is hazardous.
9. Understand and have skills in making solutions used in the laboratory as well as how to make accurate measurements using precision instruments such as balances and micropipettors.
10. Students will have gained skills in the use of recombinant DNA techniques, PCR, DNA sequence analysis, HPLC, gas chromatography, mass spectroscopy, IR spectroscopy, UV/VIS spectroscopy, as well as the use of the computer to collect and analyze experimental data.
11. Use computers to generate written reports, analyze data, collect information from databases, and use the Internet.
12. Have an appreciation for the ethical issues that are relevant to the newly emerging field of biotechnology.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] These courses are available only at Middlesex Community College. Students are encouraged to consult their advisor in planning their course of studies.

See page 104 for common course numbering information.

Business Administration Career, A.S. Degree

Program Design

The Business Administration Career program prepares graduates for employment as management trainees and for entry level positions in banks, insurance companies and governmental agencies. It is a general business program requiring students to take courses in accounting, business law, economics, management and corporation finance.

Although many courses in this program may be transferred, it is possible that they will transfer only as electives. Students planning to earn a bachelor's degree should register in the Accounting and Business Administration Transfer Program.

This program is of considerable benefit to employed students looking for professional development or students who hold degrees in unrelated areas and are looking for a career specialty or career change.

Curriculum

Students may attend full- or part-time. *Note: All business courses numbered 100 or higher require students to be eligible for ENG 111 except BUS 111. All accounting courses numbered 100 or higher require students to be eligible for ENG 111 and MATH 101 or higher.*

Business Administration Career Requirements

ACCT 101	Financial Accounting	4
BUS 101	Business Law I	3
BUS 111	Business Environment	3
Gen Ed	ENG 111: College Reading and Writing	3
QM 110	Quantitative Methods for Business	3

Subtotal: 16

ACCT 102	Managerial Accounting	4
BUS 102	Business Law II	3
CIS 106	Windows	2
Gen Ed	COMM/SPCH 213: Effective Speaking	3
ACCT 105	Accounting & Business Applications Software	3
Gen Ed	MATH 110: Quantitative Literacy	3

Subtotal: 18

BUS 121	Principles and Methods of Marketing I	3
Gen Ed	ECON 102: Microeconomics	3
Elective	Business	3
Gen Ed	Mode 5	3-4
Gen Ed	Mode 6	3

Subtotal: 15-16

BUS 201	Business Management	3
BUS 214	Managerial Communications	3
FNCE 241	Corporation Finance	4
Gen Ed	Mode 3	3
Gen Ed	Mode 1	3

Subtotal: 16

Total Credits Required: 65-66

Learning Outcomes

Upon successful completion of all Business Administration Career degree program requirements, graduates will

1. Prepare and interpret financial statements and use accounting for managerial decisions.
2. Understand and discuss financial issues dealing with the environment of managerial finance; including working capital management, short-term financing, capital markets, and the theory of the value of the firm (risk, leverage, cost of capital).
3. Generally understand the U.S. legal system and be able to apply principles of contract law, sales law under Article II of the Uniform Commercial Code, and the law of agency to business situations.
4. Discuss partnership and corporation law, property, wills and estates, commercial paper, the bank collection process, secured transactions and creditors' rights, and government regulation of business.
5. Analyze principles, techniques, and major functions (planning, organizing, lending and controlling) of business enterprise management.
6. Understand marketing methods and institutions, including analysis and interrelationship of the marketing mix.
7. Demonstrate computer skills appropriate to his/her focus area including word processing, electronic spreadsheet, database management, general ledger accounting system, and presentation software.
8. Use the Internet for business purposes, including research, marketing, and stock market analysis.
9. Demonstrate an understanding of how the United States economic system is organized, how it functions and how it impacts the global economy.
10. Successfully enter the marketplace in the field of business.
11. Demonstrate proficiencies in reading, writing, listening, presentation and analytical skills.
12. Work with others, including culturally and intellectually diverse people; think critically; and gain an appreciation for life-long learning.
13. Rationalize and present solutions to problems using business knowledge and knowledge from social sciences, arts, literature, mathematics and science.
14. Develop sound ethical, philosophical and moral professional characteristics.
15. Demonstrate a responsible attitude in relationships with employers, peers and toward the working environment.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

***This program has been suspended
as of Fall 2003 and no new students
are being accepted.***

Clinical Laboratory Technology, A.S. Degree *(formerly Medical Laboratory Technician)*

Program Design

The Clinical Laboratory Technology associate degree program provides training for medical laboratory work concerned with the collection of information related to a patient's health status. Even though they spend less time with the patient than other health professionals, laboratorians supply valuable service to patient care. CLT's perform a wide variety of tasks including collection of blood specimens, performing analytical procedures on biological specimens while relating lab findings to common disease processes; performing preventative and corrective maintenance on automated equipment; monitoring of quality control procedures; communicating with patients and other health professionals and the public while exhibiting professional behavior. Lastly, in order to maintain competence in this profession, laboratory workers must have a lifelong commitment to continuing education. Graduates of the program are eligible to sit for the national certifying examinations offered by the Board of Registry of the American Society for Clinical Pathology and the National Credentialing Agency for Laboratory Personnel.

Scholastic Preparation and Admission Process[†]

All candidates must submit a college application and a separate Health Careers application. Applications are accepted throughout the year. Complete information on the admission procedures is available from the Admissions Office or by calling the program coordinator at 860-512-2726.

In addition, applicants must arrange to have an official high school transcript or a copy of a high school equivalency diploma sent to the Admissions Office as well as official transcripts for all studies in other schools or colleges. These transcripts will determine whether a candidate has met the required basic competencies in mathematics, and science. Candidates who meet the basic competencies will be given an interview that will assess their knowledge of the laboratory field, measure their potential for working in a medical setting and discuss their course of study. If students do not meet basic competencies, the College has personnel and courses available to assist them.

Accreditation

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences which is located at 8410 W. Bryn Mawr, Suite 670, Chicago, IL 60631-3415. Telephone: 773-714-8880.

Curriculum

The first year of the program is spent at the College and combines general education and clinical courses. The second year includes a 12-month clinical year. The curriculum includes lectures as well as clinical training and practice under supervision. Clinical training is offered at Hartford Hospital. Students must have a physical, which includes drug testing, before beginning their clinical. During the clinical year, students must pay for parking, uniforms and other miscellaneous expenses.

The first year may be done on a part-time basis. The second clinical year must be done full-time. Those courses with an CLT designator are offered only during the day.

Clinical Laboratory Technology Requirements

Gen Ed	CHEM 111: College Chemistry I	4
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	MATH 102: Mathematical Modeling III or	
Gen Ed	MATH 110: Quantitative Literacy	3
MLT 142	Introduction to the Medical Laboratory	2
Gen Ed	Mode 1	3
CIS 102	Getting Acquainted with the Personal Computer or	1
CIS 106	Windows	2

Subtotal: 16-17

BIO 112	Human Biology	4
BIO 141	Microbiology	4
Gen Ed	CHEM 112: College Chemistry II	4
Gen Ed	Mode 3	3
MLT 182	Clinical Microscopy I	1
MLT 272	Parasitology/Mycology	2

Subtotal: 18

Gen Ed	Mode 6	3
MLT 201	Microbiology I	4
MLT 211 ^{††}	Chemistry I	4
MLT 221 ^{††}	Hematology	3
MLT 231 ^{††}	Immunology/Serology	2
MLT 251 ^{††}	Phlebotomy	2

Subtotal: 18

MLT 202 ^{††}	Microbiology II	4
MLT 212 ^{††}	Chemistry II	4
MLT 222 ^{††}	Hematology II	3
MLT 262 ^{††}	Immunohematology	3
MLT 282 ^{††}	Clinical Microscopy II	1

Subtotal: 15

Total Credits Required: 67-68

Learning Outcomes

Upon successful completion of all Clinical Laboratory Technology degree program requirements, graduates will

1. Sit for the national certifying examinations offered by the Board of Registry of the American Society of Clinical Pathologists and the National Credentialing Agency for Laboratory Personnel.
2. Collect, process and analyze biological specimens.
3. Relate lab findings to common disease processes.
4. Perform preventive and corrective maintenance on automated equipment.
5. Monitor quality control procedures.
6. Apply principles of safety.
7. Communicate with patients, other health professionals, and the public while exhibiting professional behavior.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] Students who do not meet the program entrance requirements should select appropriate courses from the Pre-Allied Health Program, an access program that provides courses and guidance to prepare the student for a career in the health field. (See page 27.)

^{††} These courses are taught at Hartford Hospital.

See page 104 for common course numbering information.

Communication, A.S. Degree

Program Design

The Communication associate degree program prepares students for employment in television as reporters, production assistants, camera operators and videotape editors; in radio as on-air personnel and copywriters; in journalism as reporters, photographers and feature writers; and in public relations as entry-level employees or trainees.

Students have the opportunity to participate in up to two semesters of media work experience with placement at area media outlets. Students are encouraged to take up to six credits of Cooperative Education/Work Experience. Any Cooperative Education/Work Experience beyond six credits will not be applied towards a degree.

Students who are interested in specializing in TV production should inquire about the articulation agreement between Manchester and Middlesex Community Colleges. Students are able to take courses at both colleges and receive an associate's degree in broadcast communications from Middlesex Community College.

Curriculum

Students may enroll in this program on a full- or part-time basis and attend classes during the day or evening. *Note that to enter COMM 281 and continue the program you must receive a grade of at least B in ENG 111 or have permission from the instructor.*

Communication Requirements

ENG 111	College Reading and Writing	3
COMM 176/FA 176	Video/Film Making or	3
COMM 210	Broadcast/TV Production	4
Gen Ed	PSYC 111: General Psychology	3
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3
Gen Ed	MATH 110: Quantitative Literacy	3

Subtotal: 15-16

COMM 150	Issues in Print, Broadcast and Photojournalism	3
COMM 281	Basic Newswriting	3
ENG 120	Introduction to Literature	3
HIST 102	Western Civilization or	
HIST 202	United States History or	
HIST 215	America since 1945	3
POL* 111	American Government or	
POL* 112	State and Local Government	3

Subtotal: 15-16

COMM 206	Broadcast Announcing or	
COMM 285	Television News Reporting or	
MM 205	Digital Video On-line Editing	3
COMM 218	TV Writing	3
COMM 270	Cooperative Education/Work Experience	3
COMM 290	Desktop Publishing	3
Gen Ed	COMM 171/FA 171: Film Study & Appreciation	3

Subtotal: 15

COMM 201	Public Relations or	3
COMM 282	Feature and Magazine Writing	
COMM 208	Mass Communications	3
PSYC 131	Social Psychology or	
PSYC 240	Organizational Behavior	3
COMM 271	Cooperative Education/Work Experience or	
Elective	Undesignated	3
Gen Ed	Mode 5	3-4

Subtotal: 15-16

Total Credits Required: 60-63

Learning Outcomes

Upon successful completion of all Communication degree program requirements, graduates will

1. Write copy for radio and television.
2. Research and write newspaper and feature stories.
3. Operate still and video cameras.
4. Edit videotape.
5. Conduct interviews for news stories and television programs.
6. Write scripts for radio and television programs.
7. Develop and deliver effective oral presentations.
8. Appreciate the role and effect of mass media upon society.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Computer Engineering Technology, A.S. Degree

Program Design

The Computer Engineering Technology A.S. Degree program provides students with a broad background in the underlying disciplines of computer engineering and computer electronics technology including: the fundamentals of computer electronics including basic AC/DC linear circuit analysis, analog and digital electronics, and microprocessor electronics to enable students to perform component and board level computer electronics analysis and troubleshooting; broad experience in problem solving with computers; the basics of computer architecture and organization; an understanding of the basics of computer operating systems and the integration of computer hardware and software; and an understanding of basic computer networking concepts and technologies including the fundamentals of network design, installation, and maintenance.

Students will also acquire a comprehensive educational background in mathematics, physics, and general education, in addition to acquired skills and knowledge in the field of computer engineering technology, designed to develop and enhance their critical thinking and problem analysis and resolution skills.

The Computer Engineering Technology A.S. Degree program prepares students for transfer to baccalaureate institutions with bachelor degree programs in computer science or other related computer science/technology programs, or for entry into computer-based industry positions and further industry-based training. Students planning to transfer to baccalaureate institutions should consult with an advisor regarding the requirements of these institutions and transferability of courses.

The experience and training in the Computer Engineering Technology A.S. Degree program will begin to prepare students for the national CompTIA Computer Technicians A+ Certification Examination.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. For students not prepared for the required mathematics or computer technology courses in the program, MCC offers a wide range of preparatory courses. Please consult with a computer science/technology faculty advisor.

Computer Engineering Technology Requirements

Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	MATH 115: Technical Mathematics I	3
ELC 120	AC/DC Circuit Analysis	4
CST 110	Introduction to Computer Technology	3
CS 125	Programming Logic and Design with C++	3

Subtotal: 16

ENG 114	Technical Writing	3
MATH 116	Technical Mathematics II	3
ELC 122	Electronics	4
CST 130	Fundamentals of Computer Operating Systems	4
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3

Subtotal: 17

Gen Ed	PHYS 121: General Physics I	4
CST 291	Computer Hardware Maintenance	4
ELC 220	Digital Electronics	4
Gen Ed	Mode 1	3
Gen Ed	Psych 240: Organizational Behavior	3

Subtotal: 18

Gen Ed	PHYS 122: General Physics II	4
CS 216	Computer Organization and Architecture	3
CS 215/ELT 215	Microprocessor Assembly language	4
CST 271	Network Theory and Application	4

Subtotal: 15

Total Credits Required: 66

Learning Outcomes

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Differentiate and apply the basic technologies used in Local and Wide Area Networks. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician's point of view.
5. Demonstrate an understanding of the fundamentals of computer electronics from circuit analysis, including analog and digital electronics.
6. Demonstrate a working knowledge of the internal structure of digital computers.
7. Discuss and explore the relationship between the CPU, assembly language and machine language.
8. Discuss and explore the relationship between ROM, the instruction set, system clock and the internal addressing schemes.
9. Discuss and describe the Data Path.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Computer Help Desk Technology, A.S. Degree

Program Design

The Computer Help Desk Technology A.S. Degree Program is for students seeking to work in the computer field as customer support specialists. The program will assist students in acquiring the background and skills to enable them to solve end-user computer problems, to make accurate determinations of the level of support required by the user, to upgrade and install hardware and software, to communicate appropriately with end-users, and to use critical thinking skills to solve problems.

Classroom discussion is supplemented with "hands-on" computer laboratory experience for skill development in applications programs, operating systems, hardware troubleshooting and repair, basic network strategies, and help desk technology. Students will be exposed to professional help desk work stations and software. They will be given practical work experience in a real customer support work environment.

In addition to acquired skills, experience and knowledge in all aspects of Computer Help Desk Technology, the student will gain a comprehensive background in written and oral communications and general education.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. Students should consult with a computer science/technology faculty advisor to plan their program and schedule of classes, and to discuss required course prerequisites.

Computer Help Desk Technology Requirements

Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	MATH 110: Quantitative Literacy	3
CIS 118	Presentation Software: PowerPoint	1
CST 125	Help Desk Concepts	3
CST 110	Introduction to Computer Technology	3
BOT 125	Introductory Word for Windows	1
BOT 126	Intermediate Word for Windows	1
Gen Ed	COMM 213: Effective Speaking	3
		18

ENG 114	Technical Writing	3
BOT 151	Customer Service Skills for the Help Desk Professional	3
CIS 159	Database Management: ACCESS	3
CIS 166	Application Software: EXCEL	3
CST 291	Computer Hardware Maintenance	4
		16

CST 115	Building Web Pages	3
CST 225	Troubleshooting Microsoft Office Products	4
CST 271	Network Theory and Application	4
CST 292	System Software Maintenance	4
COMM 220	Interpersonal Communications	3
		18

Gen Ed	PHYS 110: Elements of Physics	4
ENG 115	Critical Thinking	3
CST 226	Practicum in Help Desk Support	3
Gen Ed	Mode 1	3
Gen Ed	PSYC 240: Organizational Behavior	3

16

Total Credits Required: 68

Learning Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
2. Demonstrate proficiency in the use of computer applications including word processing, spreadsheets, presentation software, and database management software.
3. Demonstrate an understanding of the assessment techniques used to determine source of computer problems.
4. Recognize and describe the various aspects of computer operating systems and applications programs installation and configuration.
5. Differentiate and apply the basic technologies used in Local and Wide Area Networks.
6. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician's point of view.
7. Demonstrate proficiency in installation, maintenance, upgrade and troubleshooting of computer operating systems from the PC technician's point of view.
8. Illustrate problem solving techniques involving simulated end-user computer problems and situations.
9. Employ a solid understanding of important customer service techniques.
10. Demonstrate competence in working with a call center system and professional help desk software.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Computer Information Systems, A.S. Degree

Program Design

The Computer Information Systems associate degree program prepares graduates for employment as entry-level programmers. Students learn the principles of structured programming with a strong emphasis on programming in COBOL and a personal computer language such as Visual Basic or C. Other areas of study include systems analysis and design, business application software, and microcomputer languages.

Graduates will be able to program business applications using structured design methodology. An optional work experience course is also available.

Students interested in earning a bachelor's degree in management information systems should enroll in our Management Information Systems Transfer Program.

Curriculum

The curriculum may be completed on a full- or part-time basis. Students, especially those attending part-time, should work closely with a faculty member or advisor to insure they select courses most appropriate to their goals.

Students with no keyboarding experience should take BOT 100A Keyboarding, concurrently with their first CIS course.

Computer Information Systems Requirements

CIS 106	Windows	2
CST 110	Introduction to Computer Technology	3
CS 125	Programming Logic and Design with C++	3
Gen Ed	ENG 111: College Reading & Writing	3
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3
Elective†	Applications Elective	3

Subtotal: 17

ACCT 101	Financial Accounting	4
ENG 114	Technical Writing or	
BUS 214	Managerial Communication	3
CS 213	Computer Programming in COBOL I	4
CS 201	Visual Basic I or	
CS 223	Programming in C++	3
Gen Ed	ECON 102: Microeconomics	3

Subtotal: 17

CIS 159	Database Management: Access	3
CS 214	Computer Programming in COBOL II	4
CS 202	Visual Basic II or	
CS 228	Advanced Programming in C++	3
Gen Ed	MATH 111: Elementary Statistics with Computer Applications	4
Gen Ed	Mode 1	3

Subtotal: 17

CST 271	Network Theory and Application	4
Elective††	Programming Elective	3
CS 225	Systems Design	4
Gen Ed	Mode 5	3
Gen Ed	Mode 6	3

Subtotal: 17

Total Credits Required: 68

Learning Outcomes

Upon successful completion of all Computer Information Systems degree program requirements, graduates will

1. Demonstrate an understanding of a computer's operating system with regard to file management, system maintenance, system tools, and the customization of the computing environment.
2. Demonstrate proficiency in the use of a relational desktop database management system including tables, forms and report objects.
3. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
4. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
5. Identify and apply the major concepts and language requirements to design, code, execute, and debug programs in the required programming languages.
6. Differentiate and apply the basic technologies used in Local and Wide Area Networks.
7. Demonstrate the ability to integrate knowledge gained through the curriculum in order to analyze a business problem and design the appropriate hardware and software solutions.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

***Applications Elective** — Choose **3** credits from the following:

BOT 125: Introductory Microsoft Word	1
BOT 126: Intermediate Microsoft Word	1
CIS 118: PowerPoint	1
CIS 166: Excel	3

†† Programming Elective — Choose **one** from the following:

CS 201: Visual Basic I	3
CS 202: Visual Basic II	3
CS 259: Database Management - Advanced Access with VBA	3
CS 223: Programming in C++	3
CS 224: Programming in Java	3
CS 227: Advanced Java	3
CS 230: Database Concepts and Applications with Oracle	3
CS 240: Data Structures	3
CS 228: Advanced Programming in C++	3

Note: Students may elect to substitute CIS 270: Cooperative Education/Work Experience for any equivalent CIS credit course with prior departmental approval.

See page 104 for common course numbering information.

Computer Network Technology, A.S. Degree

Program Design

The Computer Network Technology A.S. Degree program provides students with a broad background in the underlying disciplines of computer networking technology including: the fundamentals of and specific skills in computer programming; broad experience in solving problems with computers; the basics of computer architecture and organization; an understanding of the basics of computer operating systems and experience with the predominant computer network operating systems; and an understanding of computer networking concepts and technologies including the fundamentals of network design, installation, configuration, maintenance, and network administration.

Students will also acquire a comprehensive educational background in mathematics, physics, and general education, in addition to acquired skills and knowledge in the field of computer engineering technology, designed to develop and enhance their critical thinking and problem analysis and resolution skills.

The Computer Network Technology A.S. Degree program prepares students for transfer to baccalaureate institutions with bachelor degree programs in computer science or other related computer science/technology programs, or for entry into computer-based industry positions and further industry-based training. Students planning to transfer to baccalaureate institutions should consult with an advisor regarding the requirements of these institutions and transferability of courses.

The experience and training in the Computer Network Technology Certificate program will begin to prepare students for the core and elective computer industry network certification examinations such as the Microsoft MCP (Microsoft Certified Professional) and MCSE (Microsoft Certified Systems Engineer) certifications.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. For students not prepared for the required mathematics or computer technology courses in the program, MCC offers a wide range of preparatory courses. Please consult with a computer science/technology faculty advisor.

Computer Network Technology Requirements

Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	MATH 115: Technical Mathematics I	3
CST 110	Introduction to Computer Technology	3
CS 125	Programming Logic and Design with C++	3
Gen Ed	PSYC 240: Organizational Behavior	3

Subtotal: 15

ENG 114	Technical Writing	3
Gen Ed	MATH 116: Technical Mathematics II	3
CST 130	Fundamentals of Computer Operating Systems	4
CST 271	Network Theory and Application	4
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3

Subtotal: 17

CST 233	Computer Network Management	3
CST 291	Computer Hardware Maintenance	4
CST 231	Computer Operating Systems- Windows Workstation	4
Gen Ed	PHYS 110: Elements of Physics	4
CST 281	Network Security Fundamentals	3

Subtotal: 18

MATH 111	Elementary Statistics with Computer Applications	4
CST 232	Computer Operating Systems-Windows Server	4
CST 272	Network Infrastructure and Implementation	3
Elective [†]	Technical Electives (see list)	3
Gen Ed	Mode 1	3

Subtotal: 17

Total Credits Required: 67

Learning Outcomes

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Describe the essential operating system components and the operating services.
5. Differentiate and apply the basic technologies used in Local and Wide Area Networks.
6. Demonstrate and implement advanced networking infrastructure concepts.
7. Demonstrate the use of appropriate tools to administer and troubleshoot server and client computers on a network.
8. Demonstrate skills in installation, configuration, maintenance, troubleshooting, and upgrade of computer operating systems at both the workstation and server levels.
9. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician's point of view.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†]Technical Electives List:

CST 115: Building Web Pages	3
CST 292: System Software Maintenance	4
CST 293: Server Hardware Maintenance	4
CS 201: Visual Basic I	3
CS 202: Visual Basic II	3
CS 222: Programming in C	3
CS 223: Programming in C++	3
CS 224: Programming in Java	3
CS 230: Database Concepts & Applications with Oracle	3

See page 104 for common course numbering information.

Computer Programming Technology,

A.S. Degree

Program Design

The Computer Programming Technology A.S. Degree program provides students with a broad background and specific skills in the disciplines of computer programming technology including: the fundamentals of and specific skills in computer programming; the structured logic and design of computer programs; the fundamentals of algorithm design and analysis of data structures; broad experience in problem solving using computers; the basics of computer organization and architecture; an understanding of the basics of computer operating systems; an understanding of basic computer networking technology; and an emphasis on current, state-of-the-art, object-oriented computer programming languages.

Students will also acquire a comprehensive educational background in mathematics, physics, and general education, in addition to acquired skills and knowledge in the field of computer programming technology, designed to develop and enhance their critical thinking and problem analysis and resolution skills.

The Computer Programming Technology A.S. Degree program prepares students for transfer to baccalaureate institutions with bachelor degree programs in computer science or other related computer science/technology programs, or for entry into computer-based industry positions and further industry-based training. Students planning to transfer to baccalaureate institutions should consult with an advisor regarding the requirements of these institutions and transferability of courses.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. For students not prepared for the required mathematics or computer technology courses in the program, MCC offers a wide range of preparatory courses. Please consult with a computer science/technology faculty advisor.

Computer Programming Technology Requirements

Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	MATH 115: Technical Mathematics I	3
CST 110	Introduction to Computer Technology	3
CS 125	Programming Logic and Design with C++	3
Gen Ed	PSYC 240: Organizational Behavior	3
Gen Ed	Mode 1	3

Subtotal: 18

ENG 114	Technical Writing	3
Gen Ed	MATH 116: Technical Mathematics II	3
CST 130	Fundamentals of Computer Operating Systems	4
CS 223	Programming in C++	3
CS 201	Visual Basic I	3

Subtotal: 16

CS 202	Visual Basic II	3
CS 228	Advanced Programming in C++	3
Elective [†]	Technical Elective (See list)	3
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3
Gen Ed	PHYS 110: Elements of Physics	4

Subtotal: 16

MATH 111	Elementary Statistics with Computer Applications	4
CS 224	Programming in Java	3
CS 230	Database Concepts & Applications with Oracle	3
Elective [†]	Technical Electives —Choose 2 (See list)	6

Subtotal: 16

Total Credits Required: 66

Learning Outcomes

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Describe the essential operating system components and the operating services.
5. Identify and apply the major concepts and language requirements to design, code, execute, and debug programs in the required programming languages.
6. Demonstrate an understanding of proper database design. Apply System Development Life Cycle concepts to plan, design, develop, and code a database.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†]Technical Electives List:

CS 215: Microprocessor Assembly Language	4
CS 216: Computer Organization & Architecture	3
CS 227: Advanced Java	3
CS 240: Data Structures	3
CST 115: Building Web Pages	3
CST 271: Network Theory and Application	4
CST 291: Computer Hardware Maintenance	4

See page 104 for common course numbering information.

Computer Science, A.S. Degree

Program Design

The Computer Science A.S. Degree program provides students with a broad background in the underlying disciplines of computer science including: the fundamentals of computer programming; the fundamentals of algorithm design and analysis of data structures; broad experience in problem solving with computers; the basics of computer architecture, organization and assembly language; an understanding of the basics of computer operating systems; and an understanding of computer networking concepts and technologies including the fundamentals of network design, installation, maintenance and administration.

Students will also acquire a comprehensive educational background in mathematics, physics, and general education, in addition to acquired skills and knowledge in the field of computer science, designed to develop and enhance their critical thinking and problem analysis and resolution skills.

The Computer Science A.S. Degree program prepares students for transfer to baccalaureate institutions with bachelor degree programs in computer science or other related computer science/technology programs, or for entry into computer-based industry positions and further industry-based training. Students planning to transfer to baccalaureate institutions should consult with an advisor regarding the requirements of these institutions and transferability of courses.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. For students not prepared for the required mathematics and computer science courses in the program, MCC offers a wide range of preparatory courses. Please consult with a computer science/technology faculty advisor.

Computer Science Requirements

Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	MATH 190: Analytic Geometry and Calculus I	5
CST 110	Introduction to Computer Technology	3
CS 125	Programming Logic and Design with C++	3
Gen Ed	Mode 6	3

Subtotal: 17

Gen Ed	ENG 120: Introduction to Literature	3
MATH 192	Analytic Geometry and Calculus II	4
Gen Ed	PHYS 131: University Physics I	4
CST 130	Fundamentals of Computer Operating Systems	4
CS 223	Programming in C++	3

Subtotal: 18

MATH 220	Introduction to Linear Algebra	3
CST 271	Network Theory and Application	4
CS 215	Microprocessor Assembly Language	4
CS 240	Data Structures	3
PHYS 132	University Physics II	4

Subtotal: 18

CS 228	Advanced Programming in C++	3
CS 216	Computer Organization and Architecture	3
CS 129	Algorithm Design and Analysis	3
Gen Ed	Mode 1	3
Gen Ed	Mode 6	3

Subtotal: 15

Total Credits Required: 68

Learning Outcomes

Upon successful completion of all requirements of the Computer Science A.S. Degree program, graduates will be able to:

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Describe the essential operating system components and the operating services.
5. Demonstrate an understanding of the relationships between efficient algorithms and data structures and how efficiencies can be measured.
6. Utilize knowledge of algorithm design and data structures for the solution of problems, including efficient sorting, searching, and graph manipulation
7. Demonstrate a working knowledge of the internal structure of the digital computer.
8. Identify and apply the major concepts and language requirements to design, code, execute, and debug programs in the required programming languages.
9. Differentiate and apply the basic technologies used in Local and Wide Area Networks.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Computer Technology, A.S. Degree

Program Design

The Computer Technology A.S. Degree program provides students with a broad background in the differently focused fields of computer technology and the opportunity to obtain both broad and in-depth knowledge of the theory, design, installation, maintenance, management, and application of modern computer hardware and software including: computer programming skills; Internet and Web page design skills; fundamentals of computer operating systems; basic computer architecture; computer hardware and software installation, upgrading, configuration and maintenance; fundamentals of computer networks; and computer database concepts and applications.

Students will also acquire a comprehensive educational background in mathematics, physics, and general education, in addition to acquired skills and knowledge in the field of computer technology, designed to develop and enhance their critical thinking and problem analysis and resolution skills.

The Computer Technology A.S. Degree program prepares students for transfer to baccalaureate institutions with bachelor degree programs in computer science or other related computer science/technology programs, or for entry into computer-based industry positions and further industry-based training. Students planning to transfer to baccalaureate institutions should consult with an advisor regarding the requirements of these institutions and transferability of courses.

The experience and training in the Computer Technology A.S. Degree program will begin to prepare students for the national CompTIA Computer Technicians A+ Certification Examination.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. For students not prepared for the required mathematics or computer technology courses in the program, MCC offers a wide range of preparatory courses. Please consult with a computer science/technology faculty advisor.

Computer Technology Requirements

Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	MATH 115: Technical Mathematics I	3
Gen Ed	PSYC 240: Organizational Behavior	3
CST 110	Introduction to Computer Technology	3
CS 125	Programming Logic and Design with C++	3
CST 114	Exploring the Internet	2

Subtotal: 17

ENG 114	Technical Writing	3
Gen Ed	MATH 116: Technical Mathematics II	3
CST 130	Fundamentals of Computer Operating Systems	4
CST 271	Network Theory and Application	4
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3

Subtotal: 17

CS 223	Programming in C++	3
CST 291	Computer Hardware Maintenance	4
Elective [†]	Technical Elective (See list)	3
MATH 111	Elementary Statistics with Computer Applications	4
Gen Ed	PHYS 110: Elements of Physics	4

Subtotal: 18

CST 292	System Software Maintenance or	
CST 293	Server Hardware Maintenance	4
CS 230	Database Concepts & Applications with Oracle	3
Elective [†]	Technical Elective—Choose 2 (See list)	6
Gen Ed	Mode 1	3

Subtotal: 16

Total Credits Required: 68

Learning Outcomes

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Describe the essential operating system components and the operating services.
5. Identify and apply the major concepts and language requirements to design, code, execute, and debug programs in the required programming languages.
6. Differentiate and apply the basic technologies used in Local and Wide Area Networks.
7. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician's point of view.
8. Demonstrate proficiency in installation, maintenance, upgrade and troubleshooting of computer operating systems from the PC technician's point of view.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†]Technical Electives List — Choose 3

CST 272: Network Infrastructure and Implementation	3
CS 201: Visual Basic I	3
CS 202: Visual Basic II	3
CS 223: Programming in C++	3
CS 224: Programming in Java	3
CST 115: Building Web Pages	3
CST 231: Operating Systems-Windows Workstation	4
CST 232: Operating Systems-Windows Server	4
CST 281: Network Security Fundamentals	3
CST 292: Systems Software Maintenance	4
CST 293: Server Hardware Maintenance	4

See page 104 for common course numbering information.

Criminal Justice, A.S. Degree

Program Design

This program offers the opportunity to prepare for work within the various fields of criminal justice in both the public forum and private agencies. The curriculum consists of a strong liberal arts academic base supported by social science electives and criminal justice core courses. The latter are enhanced by electives in criminal justice, corrections and security services. The prescribed program also provides for free electives that may benefit the student's educational awareness and career choice. Courses are available during the day and evening.

The program has strong relationships with many local and state agencies, colleges and universities. Students have been successful in transferring all program courses. A strong element of the program is a cadre of local professionals who supplement the regular faculty, serving as guest lecturers, adjunct faculty and intern sponsors.

Credit for criminal justice core courses and electives may be obtained by students who submit police and criminal justice-related training and work experience for evaluation.

Criminal Justice Requirements

CJ 111	Introduction to Criminal Justice	3
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	POL* 111: American Government <u>or</u> POL* 112: State and Local Government	3
Gen Ed	Mode 3	3
Gen Ed*	MATH 110: Quantitative Literacy	3

Subtotal: 15

CJ 112	Police Patrol Procedures <u>or</u>	
CJ 114	Introduction to Corrections <u>or</u>	
CJ 230:	Introduction to Forensic Science	3
CJ 122	Police Administration <u>or</u>	
CJ 203	Corrections Administration <u>or</u>	
CJ 231:	Advanced Forensic Science	3
ENG 112	Advanced Composition	3
HIST 101	Western Civilization I <u>or</u>	
HIST 102	Western Civilization II	3
Gen Ed	Mode 5	3

Subtotal: 15

CJ 211	Criminal Law I	3
CJ 221	Criminal Investigation	3
SOSC 270	Cooperative Education/Work Experience <u>or</u>	
COMM 220	Interpersonal Communication	3
Elective	Social Science	3
Gen Ed	Mode 6	3

Subtotal: 15

CJ 222	Evidence and Court Procedure	3
POL* 212	Constitutional Law and Civil Rights	3
CJ 212	Criminal Law II	3
Elective	criminal justice	3
Gen Ed	Mode 1	3
CIS 102	Getting Acquainted with the IBM	1

Subtotal: 16

Total Credits Required: 61

Learning Outcomes

Upon successful completion of all Criminal Justice degree program requirements, graduates will

1. Demonstrate knowledge of the language, terms, and concepts of criminal justice and police administration.
2. Define and describe each component of the present criminal justice system.
3. Identify, describe, and clarify problems existing in the present criminal justice system and propose ways of continued improvement of the system.
4. Identify the nature, origins, structure, purpose, and constitutional limits of criminal law.
5. Identify the doctrines of complicity and inchoate crimes.
6. Identify the defenses of justification and excuse to an individual's criminal liability.
7. Describe the roots of early common law and how it relates to statutory law.
8. Demonstrate an understanding of the fundamentals of criminal investigations.
9. Demonstrate an understanding of new and innovative investigation methods and techniques.
10. Demonstrate an understanding of laws of evidence as it relates to the criminal justice field.
11. Identify courtroom procedures.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

* Students planning to transfer should take MATH 111.

See page 104 for common course numbering information.

Disability Specialist, A.S. Degree

Program Design

The Disability Specialist associate degree program prepares students to work in a wide range of positions in private and public educational and human service agencies. Through individual consultation, each student will pursue a course of study with an emphasis upon the unique vocational goals he or she wishes to achieve. Every effort will be made to provide specific skill instruction; however, the focus of the curriculum is on building a strong knowledge base coupled with a positive value base which will prepare each student to assist children and adults with disabilities toward the goals of full community inclusion and participation and the attainment of their potential.

This program builds upon the Americans with Disabilities Act (ADA) of 1990, a landmark piece of legislation that provides basic civil rights to millions of people with disabilities in America. Students will become an important part of this dynamic movement and will recognize and enhance the dignity, respect and contribution of every child and adult with a disability.

Since most work settings are in the schools, workplaces, community associations, apartments and homes in the community, an understanding of "community-building" and "individual capacity-building" techniques and procedures is stressed. Creativity, sensitivity, and a capacity to concentrate on the abilities of the whole person, are essential characteristics of a disabilities specialist.

Program Philosophy

People with disabilities, as an integral part of the community, should, where necessary, receive integrated community-based support.

Mission Statement

The mission of the Disability Specialist Program is to prepare students for careers in supporting children and adults with disabilities in the community by:

1. providing information on job opportunities in the disability field to encourage the recruitment of young and continuing education students;
2. emphasizing, throughout the curriculum, community inclusion of all people with disabilities;
3. creating opportunities for interaction among the students, faculty, staff, and members of the community with and without disabilities;
4. promoting the value of a Disability Specialist degree or certificate in the job market;
5. introducing students to assistive technology and other innovations in the continuously evolving field of supporting people with disabilities in the community.

Curriculum

Because of the flexible nature of this program, students may select a full- or part-time plan of study for an associate degree or a certificate option. Each student is encouraged to seek field work in a variety of settings. These experiences assist in developing the student's work competencies.

Disability Specialist Requirements

Gen Ed	ENG 111: College Reading and Writing	3
HS 101	Introduction to Human Services	3
Gen Ed	PSYC 111: General Psychology	3
Gen Ed	SOC 101: Introduction to Sociology	3
PSYC 163	Children with Disabilities and Their Families	3

Subtotal: 15

Gen Ed	ENG 112: Reading & Writing for Academic Research	3
HS 152	Work with Individuals and Families	3
PSYC 124	Developmental Psychology	3
PSYC 173	Adults with Disabilities	3
Gen Ed	BIO 112: Human Biology	4

Subtotal: 16

ENG 120	Introduction to Literature	3
HS 201	Work with Groups	3
HS 291	Human Services Field Experience I	3
PSYC 183	The Learning Process & Disabilities	3
Gen Ed	Mode 1	3

Subtotal: 15

HS 252	Work with Agencies and Communities	3
HS 292	Human Services Field Experience II or	
SOSC 270	Cooperative Education/Work Experience	3
POL* 111	American Government or	
POL* 112	State and Local Government	3
PSYC 193	Issues and Trends in Disability	3
Gen Ed*	MATH 110: Quantitative Literacy	3

Subtotal: 15

Total Credits Required: 61

Learning Outcomes

Upon successful completion of all Disabilities Specialist degree program requirements, graduates will

1. Define and discuss basic definitions, causes, psychological characteristics, and educational approaches relevant to children with disabilities.
2. Recognize children and adults with disabilities for their unique abilities rather than their limitations.
3. Identify current trends and issues, and define the impact of current national and state laws and policies affecting people with disabilities and their families.
4. Compare various learning theories and their application to children and adults with disabilities.
5. Demonstrate an understanding of ethical standards including confidentiality.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

* Students planning to transfer should take MATH 111.

See page 104 for common course numbering information.

Drug and Alcohol Rehabilitation Counselor, A.S. Degree

Program Design

The Drug and Alcohol Rehabilitation Counselor (DARC) Associate Degree Program provides education and training for persons seeking employment or job advancement. Others transfer to upper level colleges to complete bachelor or graduate degrees in the field of substance abuse counseling or other transfer opportunities. Students receive education and training in the professional techniques of counseling with a disciplined background in the environmental and psychological causes and effects of alcohol and other drug abuse, and dependence.

DARC Internship Admission Process

Registration for the DARC internship courses (DARC 251 & 252) and placement into a DARC internship site is based on the submission of an official application packet, an interview/screening process, and the satisfactory completion of DARC 101, 111, 112 and 158. Those students seeking admission into the DARC internship must seek the advisement of the DARC program coordinator. DARC internships begin each fall semester and the internship application packet must be submitted to the DARC program coordinator at the beginning of the previous spring semester. Interviews/screenings take place each March for the following fall semester.

Curriculum

The program consists of 24 semester hours of speciality courses and 36 semester hours of general education credits.

Students may enroll full- or part-time.

Drug & Alcohol Rehabilitation Counselor Requirements

DARC 101	Alcohol and Drug Abuse	3
DARC 111	Introduction to Counseling	3
Gen Ed	ENG 111: College Reading and Writing	3
PSYC 111	General Psychology	3
Gen Ed	Mode 5	3

Subtotal: 15

DARC 112	Group Therapy and Technique	3
DARC 158	Alcohol and Drug Abuse	3
Gen Ed	Mode 3	3
Gen Ed	Psychology	3
Gen Ed	Mode 6	3

Subtotal: 15

DARC 251 [†]	Counseling Internship I	6
PSYC 210	Abnormal Psychology	3
Gen Ed	Mode 1	3
Elective	Mode 6	3

Subtotal: 15

DARC 252 [†]	Counseling Internship II	6
Elective	Humanities	3
Gen Ed	Mode 4	3
Elective	Undesignated <u>or</u>	
AH 270	Cooperative Education/Work Experience	3

Subtotal 15

Total Credits Required: 60

Learning Outcomes

Upon successful completion of all Drug and Alcohol Rehabilitation Counselor degree program requirements, graduates will

1. Define the causes and characteristics of dependency and addiction relevant to various populations and cultures.
2. Demonstrate behaviors that are appropriate for the counselor as a person and as a professional.
3. Define and apply therapies including Alderian, Existential, Person-Centered, Gestalt, Reality, Behavior, and Cognitive Behavior.
4. Define and demonstrate the Integrative Approach to therapy and Family Systems therapy.
5. Define and debate issues regarding the ethical behavior of counselors.
6. Demonstrate working knowledge and skills as they pertain to drug and alcohol rehabilitation counseling in a group setting, including the facilitation of climate setting, process feedback and consolidate learning for clients.
7. Demonstrate knowledge and skills related to relapse prevention.
8. Define and relate skills necessary to deal with dual disorders.
9. Define and describe the important terminology and concepts relating to the biology of drug and alcohol abuse.
10. Co-facilitate group counseling sessions and develop the skills outlined in the instructional units.
11. Accurately describe the overall operation of the internship placement and understand the role of the counselor as a member of the care-giving team.
12. Practice the 12 core functions of a substance abuse counselor.
13. Develop and demonstrate individual and group counseling skills.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] Courses open only to students formally accepted into this program.

See page 104 for common course numbering information.

Early Childhood Education, A.S. Degree

Program Design

The Early Childhood Education program is designed to prepare qualified students to become teachers of young children.

Curriculum

The Early Childhood Program curriculum focuses on the developmental needs of young children from birth to five years of age, and emphasizes a practical approach to supporting and enhancing growth and development. Course work in theory and methods is enhanced by participation in the field experience segment of the program.

The program is available to the student full- or part-time.

Early Childhood Education Requirements

ED 111	Introduction to Early Childhood Education	3
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	MATH 113: Structure of Mathematics I <u>or</u> MATH 110: Quantitative Literacy	3
Gen Ed	PSYC 111: General Psychology	3
Gen Ed	GEO* 111: World Regional Geography <u>or</u> ANTH 150: Cross Cultural Issues	3

Subtotal: 15

Gen Ed	Mode 1	3
ED 211	Early Childhood Curriculum	3
ED 117	Observation & Assessment of the Early Childhood Program	4
PSYC 234	Child Development	3
COMM 220	Interpersonal Communication	3

Subtotal: 16

ED 212	Creative Activities for the Early Childhood Program	3
PSYC 163	Children With Disabilities & Their Families	3
Elective	Computer Information Systems	3
ED 123	Language and Literacy	3
Gen Ed	Mode 5	3-4

Subtotal: 15-16

ED 217	Advanced Early Childhood Curriculum	3
ED 237	Science, Nature and the Environment	3
Gen Ed	Mode 3	3
Elective [‡]	Undesignated	3
ED 200	Field Experience in Early Childhood Education	3

Subtotal: 15

Total Credits Required: 61-62

[‡] ED 210 strongly recommended.

Learning Outcomes

Upon successful completion of all Early Childhood Education degree program requirements, graduates will

1. Identify, document, and assess elements that determine quality in early childhood programs.
2. Design a learning environment and use teaching strategies that are based upon child development theory.
3. Plan, implement, and evaluate a developmentally appropriate curriculum that fosters children's social, emotional, physical, and cognitive development.
4. Examine program philosophy and goals, classroom design, teacher/child interaction, planning and implementation of curriculum, observation and assessment of the young child, and family involvement in a variety of early childhood settings.
5. Demonstrate good early childhood practice in an early childhood setting.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Engineering Science, A.S. Degree

Program Design

The Engineering Science program prepares students for transfer to baccalaureate college and university programs in mechanical engineering, electrical engineering, civil engineering, chemical engineering, industrial engineering and engineering physics, as well as for immediate employment in engineering sciences and high technology fields. The program also offers students currently employed in technical positions in high technology industries the opportunity to retrain and upgrade their technical skills.

College of Technology - Engineering Pathway Program

The Engineering Science Program, through the Connecticut College of Technology Pathways Program, provides for direct entry into baccalaureate engineering programs at the University of Connecticut. Students may enter UConn engineering programs through the Engineering Science A.S. Degree program at MCC and, upon successful completion of the program, continue on to UConn as third-year engineering students with a full two years of credit towards a baccalaureate degree in engineering. For more information, call Robert Fortier at 512-2623.

Curriculum

Students may enroll in this program full- or part-time. Courses are offered during daytime or evening hours. Preparation for the Engineering Science Program includes a high school diploma or equivalent with one year of physics and three years of mathematics including Algebra I and Algebra II followed by advanced algebra or precalculus mathematics. For students not prepared for the required mathematics and English courses, MCC offers a wide range of developmental and preparatory courses. (See *Pre-Technical Education*, page 27.)

Engineering Science Requirements

Gen Ed	ENG 111: College Reading and Writing	3
ENGR 111	Introduction to Engineering	3
Gen Ed	MATH 190: Analytic Geometry and Calculus I	5
Gen Ed	PHYS 131: University Physics I	4
Gen Ed	HIST 101: Western Civilization Through the Reformation	3

Subtotal: 18

Gen Ed	ENG 120: Introduction to Literature	3
MATH 192	Analytic Geometry/Calculus II	4
Gen Ed	Mode 1	3
PHYS 132 [†]	University Physics II	4
CS 222	Programming in C	3

Subtotal: 17

CHEM 111	College Chemistry I	4
ENGR 221	Introduction to Electrical Circuit Analysis	4
ENGR 211	Engineering Statics	3
PHL* 111	Ethics	3
MATH 293	Analytic Geometry and Calculus III	4

Subtotal: 18

ENGR 212 [†]	Engineering Dynamics	3
Gen Ed	Mode 6	3
MATH 201 [†]	Differential Equations	4
CHEM 112	College Chemistry II	4

Subtotal: 14

Total Credits Required: 67

Learning Outcomes

Upon successful completion of all Engineering Science degree program requirements, graduates will

1. Transfer into a Bachelor of Science Degree Program as a continuing student in the Engineering Pathway program. Provided the transferring schools' credit requirements are met, MCC students will transfer as juniors.
2. Demonstrate the ability to assist in research, development, design, production, testing and various other functions associated with engineering.
3. Demonstrate a good understanding of engineering principles/concepts.
4. Demonstrate a good understanding of mathematical concepts.
5. Demonstrate good working knowledge of state-of-the-art hardware and software in support of Engineering design.
6. Demonstrate the ability to think through a problem in a logical manner.
7. Organize and carry through to conclusion the solution to a problem.
8. Demonstrate good communication skills.
9. Demonstrate teamwork skills.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] These courses must be included in the 25 percent minimum course requirements for the degree through course work at the College. (See page 16.)

See page 104 for common course numbering information.

Environmental Science Technician, A.S. Degree

Program Design

The Environmental Science Technician associate degree program is designed to provide graduates with the academic background and technical skills required to perform laboratory and field tests used to monitor environmental resources, determine sources of pollution, and perform other job-related duties.

Students interest in further education in this area may use their work in this program as a foundation for a bachelor's degree in Environmental Science. For more information, call the Mathematics, Science and Health Careers Division Office at 860 512-2703.

Curriculum

The specialized Environmental Science Technician courses (EVSC) must be taken in the order indicated because the body of theoretical and applied knowledge and skill building is cumulative. Alternate sequences are acceptable for the General Education component courses.

Environmental Science Technician Requirements

CHEM 111	College Chemistry I	4
EVSC 100	Introduction to Environmental Science	3
EVSC 102	Environmental Site Assessment	3
Gen Ed	MATH 111: Elementary Statistics with Computer Applications	4
Gen Ed	ENG 111: College Reading and Writing	3

Subtotal: 17 credits

CHEM 112	College Chemistry II	4
EVSC 104	OSHA - HAZWOPER Training	3
Gen Ed	BIO 101: General Biology I	4
Gen Ed	PSYC 120: Understanding Self and Others	3
MATH 115	Technical Mathematics I	3

Subtotal: 17 credits

BIO 102	General Biology II	4
EVSC 121	Hazardous Materials Management I: Chemical Safety	3
Gen Ed	Elective: Fine Arts	3
GEOL 110	Introduction to Physical Geology	4
MATH 116	Technical Mathematics II	3

Subtotal: 17 credits

EVSC 165	Field Methods for Environmental Monitoring	4
EVSC 122	Hazardous Materials Management II: Pollution Control	3
EVSC 270	Cooperative Education/Work Experience	3
Gen Ed	COMM 213: Effective Speaking	3
Gen Ed	PHYS 110: Elements of Physics	4

Subtotal: 17 credits

Total Credits Required: 68

Learning Outcomes:

Upon successful completion of all Environmental Science Technician degree program requirements, graduates will:

1. Apply the scientific method to problem solving in biology, chemistry, geology, physics and related environmental sciences.
2. Use computer technology in data collection and analysis.
3. Collect, analyze, and present scientific data.
4. Communicate knowledge of environmental sciences in written, oral, and appropriate mathematical form and language.
5. Research appropriate information sources, involving both print literature and electronic methods.
6. Apply a wide array of principles and skills in environmental science acquired in laboratory, field and lecture settings to immediate employment.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Foodservice Management, A.S. Degree

Program Design

This program provides an education and training in hospitality area subjects from food production to food protection, marketing and management. Students will also take general education courses to improve employability, job performance, and transferability to another college or university.

The Foodservice Management program is accredited by the American Culinary Educational Institute. In addition to classroom and laboratory study, students will participate in an individually planned 300-hour cooperative work experience program. Students earn credit toward graduation while employed at a work site.

Graduates have transferred and earned bachelor's degrees at such colleges and universities as Central Connecticut State University, Cornell University, University of New Haven, University of Massachusetts, University of Nevada (Las Vegas), and the University of New Hampshire.

Students are required to purchase their own official kitchen and table service uniforms.

In addition to this degree, students may earn a second associate's degree in hotel-tourism management by taking an additional 15 credit hours. Candidates interested in earning double degrees should see a hospitality management faculty member.

Curriculum

Students may enroll in this program full- or part-time. This program has an active student club that provides a variety of activities to supplement the formal curriculum. *Note: Students taking HOSP 101 must be eligible for MATH 101 or take MATH 098 concurrently. Students taking HOSP 111, BIO 104 and HOSP 112 must be eligible for ENG 111.*

Foodservice Management Requirements

HOSP 112	Sanitation and Safety	3
HOSP 101	Basic Foods Preparation	3
HOSP 111	Introduction to the Hospitality Industry	3
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed*	MATH 110: Quantitative Literacy	3

Subtotal: 15

HOSP 102	Regional American Cuisine	4
Gen Ed	BIO 104: Applied Nutrition	3
HOSP 270	Cooperative Education/Work Experience	3
Gen Ed	Mode 3	3
ACCT 101	Financial Accounting	4

Subtotal: 17

HOSP 203	Food Controls and Purchasing	3
HOSP 217	International Foods	4
HOSP 231	Consumer Research and Marketing	3
HOSP 202	Introduction to Beverage Management	3
Gen Ed	Mode 1	3

Subtotal: 16

HOSP 214	Hospitality Human Resource Management	3
HOSP 210	Buffet Catering and Garde Manger	4
BUS/HOSP 260	Choose 1 course from below:	3
HOSP 212	Relationship Marketing or Equipment Design and Layout	
Gen Ed	Choose 2 courses from below: PSYC 111: General Psychology or ECON 102: Microeconomics or GEO* 111: World Regional Geography	6

Subtotal: 16

Total Credits Required: 64

Learning Outcomes

Upon successful completion of all Foodservice Management degree program requirements, graduates will

1. Analyze theory and techniques of food preparation and presentation.
2. Prepare menus incorporating costs, acquisition, and inventory controls.
3. Summarize basic principles and concepts of the hospitality industry.
4. Create and cater events.
5. Prepare basic foods in quantity, including various regional foods.
6. Prepare ethnic cuisine in quantity.
7. Evaluate the establishment and maintenance of a safe and sanitary foodservice operation including Hazard Analysis Critical Control Point and State of Connecticut law.
8. Setup and operate the "front of the house."
9. Summarize managerial techniques and human resources management practice.
10. Demonstrate appropriate problem-solving techniques in addressing management problems.
11. Evaluate equipment design and layout for a foodservice facility.
12. Apply knowledge of computers to the hospitality industry.
13. Differentiate styles of marketing, sales analysis and planning for the hospitality industry.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

* Students planning to transfer for a bachelor's degree should take MATH 102 or higher.

See page 104 for common course numbering information.

General Studies, A.S. Degree

Program Design

The General Studies Program leads to an associate in science degree. This program provides the broadest range of electives of any at the College; students can tailor a degree program to meet their individual needs.

Curriculum

Students may enroll in this program full- or part-time. For those students who are not prepared for the mathematics and English courses required in the program, the College offers a wide range of developmental classes.

A minimum of 60 semester hours of credit is required in this program as follows:

General Education Requirements

ENG 111	College Reading and Writing	3
Gen Ed	Mode 3	3
Gen Ed	Mode 1	3
Gen Ed	Mode 4	3
Gen Ed	Mode 5	3-4
Gen Ed	Mode 6	3
Gen Ed	additional course in the above modes	3

Subtotal: 21-22

General Studies Requirements

Humanities — Choose from English, fine arts, foreign languages, humanities, music, philosophy, photography, speech, reading and theatre	6
Natural Science — Choose from any course in biology, chemistry, physics or other physical science which includes a laboratory	4
Social Sciences — Choose 2 from anthropology, economics, geography, history, political science, psychology, social science and sociology.	6
Electives	23

Subtotal: 39

Total Credits Required: 60-61

Please Note: COMM 270: Cooperative Education/Work Experience, or another cooperative education course, is available as an elective to General Studies students. Please see page 19 or contact the Cooperative Education Office for more information.

Education

If considering a career in education, students need to select a transfer institution early and consult with a counselor, and elect HIST 201 and HIST 202. Students should plan to take the PRAXIS I Examination.

Learning Outcomes

Upon successful completion of all General Studies degree program requirements, graduates will

1. Demonstrate a clear connection among elective choices and their personal, occupational or academic ambitions.
2. Work with others, including culturally and intellectually diverse peoples; think critically; and gain an appreciation for life-long learning.

Students selecting General Studies as a major who have 15 credits or fewer may be eligible to enroll in the Guaranteed Admissions program with the University of Connecticut. Check with MCC Admissions Office or Counseling Center for further information.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Graphic Design, A.S. Degree

Program Design

The purpose of the Graphic Design associate degree program is:

- to provide a graphic design transfer program in the area of design, fine arts, art education, computer graphics, and advertising;
- to offer a degree program for those considering an entry level position in related commercial art fields; and
- to provide greater technical knowledge and awareness of the creative visual arts to the community.

The program is structured to equip students with a sound foundation in technical skills, graphic design concepts, aesthetics, terminology and vocabulary, and to provide an awareness of the application of acquired technical knowledge. Computer use will be an integral part of the program. For more information call Program Coordinator Ed Hogan at 860-512-2672.

Curriculum

Students may enroll in art and graphic design courses full- or part-time. There are no requirements or prerequisites for students wishing to take courses part-time or as electives for other programs.

Graphic design/fine arts faculty members are available for consultation with students who wish to enroll in the program and, thereafter, for course selection and transfer information.

Graphic Design Requirements

Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	FA 105: History of 20th Century Art	3
FA 121	Drawing	3
FA 201	Illustration I	3
Gen Ed	Mode 6	3

Subtotal: 15

Gen Ed	ENG 120: Introduction to Literature	3
FA 131	Painting or	
FA 137	Water Color	3
FA 202	Illustration II	3
HIST 101	Western Civilization	3
Gen Ed	Mode 5	3
Elective	Studio	3

Subtotal: 18

FA 101	History of Art I or	
FA 102	History of Art II	3
FA 205	Graphic Design I	3
FA 210	Computer Graphics	3
Gen Ed	Mode 3	3
MM 245	Web Page Design	3

Subtotal: 15

FA 206	Graphic Design II	3
FA 211	Computer Graphics II or	
COMM 291	Advanced Desktop Publishing	3
Elective	Liberal Arts and Science	3
Gen Ed	MATH 110: Quantitative Literacy	3
Elective	Studio or	
FA 270	Cooperative Education/Work Experience	3

Subtotal: 15

Total Credits Required: 63

Learning Outcomes

Upon successful completion of all Graphic Design degree program requirements, graduates will

1. Demonstrate an understanding and appreciation of graphic design as a form of communication and art.
2. Demonstrate an ability to use design processes and principles to create visual products that convey a specific message to a targeted audience.
3. Demonstrate creative thinking skills and strategies and use problem-solving techniques across a wide range of media.
4. Demonstrate an understanding of how creative processes and skills are integrated with printing and other reproduction processes found in the graphic design field.
5. Demonstrate knowledge of new technologies such as computer graphics that continue to evolve into important production tools.
6. Demonstrate an awareness of the varied career paths within the graphics industry including but not limited to art direction, illustration, project design, production art, graphic design and media direction.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Hotel-Tourism Management, A.S. Degree

Program Design

The Hotel-Tourism program provides education and training for students who would like to work full-time after graduation. Students also may decide to continue their studies at another institution to earn a bachelor's degree.

In the first year, students study such areas as introduction to the hospitality industry, quantity foods production, and food protection. In the second year students focus on hotel management procedures, food, beverage, and labor cost controls, and geography and tourism development. Students must participate in an individually planned 300-hour cooperative work experience program; students earn credit toward graduation while employed at the work site.

Students have matriculated to Central Connecticut State University with Junior status in their Hospitality and Tourism Studies Program. Graduates have also transferred and earned bachelors degree's from other colleges and universities such as: Cornell University, University of Massachusetts, University of Nevada (Las Vegas), University of New Haven, and the University of New Hampshire.

Students must purchase official kitchen and table service uniforms.

In addition to this degree, students may earn a second associate's degree in foodservice management by taking an additional 15 credit hours. Students interested in earning a dual degree in Foodservice should see a counselor or a hospitality management faculty advisor.

Curriculum

Students may attend full- or part-time. This program has an active student club that provides a variety of activities to supplement the formal curriculum.

Note: Students taking HOSP 101 must be eligible for MATH 101 or take MATH 098 concurrently. Students taking HOSP 111, BIO 104, HOSP 112 and ACCT 101 must be eligible for ENG 111.

Hotel-Tourism Management Requirements

HOSP 101	Basic Foods Preparation	3
HOSP 111	Introduction to the Hospitality Industry	3
HOSP 112	Sanitation and Safety	3
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed*	MATH 110: Quantitative Literacy	3

Subtotal: 15

HOSP 102	Regional American Cuisine	4
ACCT 101	Financial Accounting	4
Gen Ed	BIO 104: Applied Nutrition	3
HOSP 270	Cooperative Education/Work Experience	3
BUS 260	Relationship Marketing	3

Subtotal: 17

HOSP 203	Food Controls and Purchasing	3
Gen Ed	PSYC 111: General Psychology <u>or</u> ECON 102: Microeconomics	3
HOSP 231	Consumer Research and Marketing	3
Gen Ed	Mode 3	3
Gen Ed	GEO* 101: Introduction to Geography <u>or</u> GEO* 111: World Regional Geography	3

Subtotal: 15

BUS 214	Managerial Communications	3
HOSP 214	Hospitality Human Resource Management	3
HOSP 241	Hotel Management Procedures	3
Gen Ed	Mode 1	3
GEO* 204	Geography and Tourism Development	3

Subtotal: 15

Total Credits Required: 62

Learning Outcomes

Upon successful completion of all Hotel-Tourism Management degree program requirements, graduates will

1. Analyze theory and techniques of food preparation and presentation.
2. Prepare menus incorporating costs, acquisition, and inventory controls.
3. Summarize basic principles and concepts of the hospitality industry.
4. Prepare basic foods in quantity, including various regional foods.
5. Evaluate the establishment and maintenance of a safe and sanitary foodservice operation including Hazard Analysis Critical Control Point and State of Connecticut law.
6. Setup and operate the "front of the house."
7. Summarize managerial techniques and human resources management practice.
8. Demonstrate appropriate problem-solving techniques in addressing management problems.
9. Evaluate equipment design and layout for a foodservice facility.
10. Apply knowledge of computers to the hospitality industry.
11. Differentiate styles of marketing, sales analysis and planning for the hospitality industry.
12. Demonstrate the practical approach to the various aspects of food and beverage cost control and purchasing.
13. Outline the legal responsibilities and rights of guests and employees.
14. Interpret hospitality sales practices and market analysis from sales to actual activity.
15. Apply office procedures and forms necessary to room guests and cash control.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

* Students planning to transfer for a bachelor's degree should take MATH 102 or higher.

See page 104 for common course numbering information.

Industrial Technology, A.S. Degree

Program Design

The Industrial Technology program has five technical options designed to prepare students for technical careers in manufacturing or engineering technology. The program is designed to respond to the increasing demand by industry for operational, supervisory and management personnel who have a combination of technical and general education backgrounds. The program provides a basic knowledge of industrial processes and processing equipment, the operation and maintenance of manufacturing equipment, the planning for and the assurance of the quality of industrial manufacturing and provides students with opportunities to develop skills in tool, material and instrumentation usage in addition to a background in general studies. The program provides graduates with training and experiences that make them flexible and adaptable to many different types of industrial environments and organizations with a reasonable amount of in-service or job-specific training.

College of Technology - Technology Pathway Program

The Industrial Technology Program, through the Connecticut College of Technology Pathways Program, provides for direct entry into baccalaureate industrial and engineering technology programs at Central Connecticut State University. Students may enter CCSU technology programs through the Industrial Technology A.S. degree program at MCC and, upon successful completion of the program, continue on to CCSU with a full two years of credit towards a baccalaureate degree in industrial technology. For more information, call Robert Fortier at 860-512-2623.

Curriculum

Students interested in the Industrial Technology Program may attend Manchester Community College full- or part-time. Part-time study permits a student to keep a full-time job and enroll in either day or evening classes. Full-time students may complete one of the six options of the program in two years.

Electronics Technology Option Requirements

Gen Ed	MATH 150: Precalculus Mathematics	4
MATH 190	Analytic Geometry and Calculus I	5
Gen Ed	PHYS 121: General Physics I	4
PHYS 122	General Physics II	4
Gen Ed	CHEM 111: College Chemistry I	4
ELT 111	Circuit Analysis I	4
ELT 112	Circuit Analysis II	4
ELT 113	Electrical Power Systems	3
ELT 201	Electronics I	4
ELT 202	Electronics II	4
ELT 213	Control Electronics	4
ELT 215	Microprocessors	4

Subtotal: 48

Industrial Engineering Technology Option Requirements

MATH 111	Elementary Statistics with Computer Applications	4
Gen Ed	MATH 115: Technical Mathematics I	3
MATH 116	Technical Mathematics II	3
Gen Ed	CHEM 111: College Chemistry I	4
ENGR 101	Engineering Drawing Interpretation	3
Gen Ed	PHYS 110: Elements of Physics	4
MFG 111	Manufacturing Materials and Processes I	3
MFG 112	Manufacturing Materials and Processes II	3
MFG 113	Production Control	3
MFG 114	Plant Layout	3
MFG 119	Productivity Improvement	3
CAD 101	Computer-Aided Design I	3
CAM 101	Computer-Aided Manufacturing	3
QA 100	Statistical Process Control	3

Subtotal: 45

Machine Tool Service Technology Option Requirements

MATH 111	Elementary Statistics with Computer Applications	4
Gen Ed	MATH 115: Technical Mathematics I	3
MATH 116	Technical Mathematics II	3
Gen Ed	CHEM 111: College Chemistry I	4
ENGR 101	Engineering Drawing Interpretation	3
ENGR 121	Mechanics	4
ENGR 122	Electricity/Electronics I	4
ENGR 123	Electricity/Electronics II	4
MFG 111	Manufacturing Materials and Processes I	3
MFG 112	Manufacturing Materials and Processes II	3
MFG 116	Hydraulics I	3
MFG 117	Hydraulics II	3
MFG 118	Pneumatics and Vacuum Systems	3
QA 100	Statistical Process Control	3

Subtotal: 47

Industrial Technology, *continued*

Quality Assurance Technology Option Requirements

MATH 111	Elementary Statistics with Computer Applications	4
Gen Ed	MATH 115: Technical Mathematics I	3
MATH 116	Technical Mathematics II	3
Gen Ed	CHEM 111: College Chemistry I	4
Gen Ed	PHYS 110: Elements of Physics	4
ENGR 101	Engineering Drawing Interpretation	3
ENGR 102	Geometric Tolerancing/Dimensioning	3
MFG 111	Manufacturing Materials and Processes I	3
MFG 112	Manufacturing Materials and Processes II	3
QA 100	Statistical Process Control	3
QA 110	Measurement and Measurement Systems	3
QA 120	Inspection and Gaging	3
QA 140	Layout Inspection	4
QA 150	Statistical Methods of Quality Improvement	3

Subtotal: 46

Tool, Die & Gage Maker Technology Option Requirements

MATH 111	Elementary Statistics with Computer Applications	4
Gen Ed	MATH 115: Technical Mathematics I	3
MATH 116	Technical Mathematics II	3
MATH 117	Technical Mathematics III	3
Gen Ed	CHEM 111: College Chemistry I	4
Gen Ed	PHYS 110: Elements of Physics	4
ENGR 101	Engineering Drawing Interpretation	3
MFG 111	Manufacturing Materials and Processes I	3
MFG 112	Manufacturing Materials and Processes II	3
MFG 115	Fundamentals of Tool Design	4
CAD 101	Computer-Aided Design I	3
CAD 102	Computer-Aided Design II	3
CAM 101	Computer-Aided Manufacturing	3
QA 100	Statistical Process Control	3

Subtotal: 46

The following are required courses and electives in addition to the above core components:

Gen Ed	ENG 111: College Reading and Writing	3
CIS 111	Introduction to Computers	3
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3
Gen Ed	SOC 101: Introduction to Sociology	3
Gen Ed	PSYC 240: Organizational Behavior	3
Gen Ed	Mode 1	3
Elective	Social Sciences	3

Subtotal: 21

Learning Outcomes

Upon successful completion of all Industrial Technology degree program requirements, graduates will

1. Demonstrate team-oriented skills that permit effective participation in multicultural work and social environments.
2. Apply appropriate mathematical and scientific principles to industrial technology applications.
3. Perform competently in mathematics through statistics, technical mathematics, and pre-calculus as appropriate.
4. Express ideas effectively through written communications.
5. Demonstrate proficiency in technical fundamentals to analyze industrial technology problems and make appropriate decisions.
6. Assist in the technical process to meet effective production objectives.
7. Possess knowledge of manufacturing processes and be able to demonstrate competency in their selection and use as appropriate.
8. Possess knowledge of measurement and inspection concepts and devices and be able to demonstrate competency in their utilization as appropriate.
9. Possess knowledge of electricity, electronics, and circuit analysis concepts and devices, as well as hydraulic and pneumatic concepts and devices, and be able to demonstrate competency in their use as appropriate.
10. Apply knowledge and skills to develop, interpret, and select appropriate manufacturing processes.
11. Maintain a practical knowledge of state-of-the-art hardware and software in support of manufacturing systems.
12. Be aware of and utilize available information and data sources in support of the manufacturing systems.
13. Apply skills and knowledge to effectively and efficiently plan, organize, implement, measure, and control manufacturing processes.
14. Demonstrate a thorough knowledge and understanding of engineering graphics as well as conventional drafting practices, such as orthographic and isometric projection, section, detail, auxiliary views, descriptive geometry, as well as geometric dimensioning and tolerancing basics.
15. Demonstrate a high level of proficiency in the use of state-of-the-art computer-aided design (CAD) software and be able to respond positively to continuous software revisions and upgrades.
16. Demonstrate a thorough understanding of 2-dimensional (2-D) and 3-dimensional (3-D) CAD concepts, procedures, and applications as pertained to tool design.
17. Apply knowledge of computer applications in integrating computer-aided manufacturing (CAM), computer numerical control (CNC), CAD, spreadsheets, graphs, and word processing for manufacturing processes documentation and support purposes.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Journalism Option, Communication, A.S. Degree

Program Design

The Journalism Option is designed for students interested in pursuing careers in print journalism as correspondents, reporters or feature writers. Students will be expected to build strong writing and communication skills, as well as a broad understanding of history, government, economics, social science and ethics, all areas critical to the practicing journalist. Cooperative Education/Work Experience is required.

Journalism Option Requirements

Gen Ed	ENG 111: College Reading and Writing	3
ECON 101	Macroeconomics or	
ECON 102	Microeconomics	3
Gen Ed	PSYC 111: General Psychology	3
COMM 213/SPCH 213	Effective Speaking	3
Gen Ed	Mode 3	3

Subtotal: 15

COMM 150	Issues in Print, Broadcast, Photojournalism	3
COMM 281	Basic Newswriting	3
Gen Ed	ENG 120: Introduction to Literature	3
HIST 102	Western Civilization or	
HIST 202	United States History or	
HIST 215	America Since 1945	3
POL* 111	American Government or	
POL* 112	State and Local Government	3

Subtotal: 15

ENG 112	Reading & Writing for Academic Research	3
COMM 218	TV Writing	3
COMM 201	Public Relations	3
Gen Ed	MATH 110 : Quantitative Literacy	3
COMM 270	Cooperative Education/Work Experience	3

Subtotal: 15

COMM 282	Magazine and Feature Writing	3
COMM 208	Mass Communication	3
SOC 102	Contemporary Social Problems	3
Gen Ed	Mode 1	3
Gen Ed	Mode 5	3-4

Subtotal: 15-16

Total Credits Required: 60-61

Learning Outcomes

Upon successful completion of all Journalism Option, Communication degree program requirements, graduates will

1. Report and write basic news stories including obituaries, accident/fire/disaster stories, news conferences and town meetings, using standard news style and applying the concepts of fairness and accuracy.
2. Identify, report and write feature stories.
3. Report and write for television news programming.
4. Operate under the SPJ Code of Ethics and understand the ethics involved in making journalistic and editorial choices.
5. Choose appropriate sources, conduct interviews, and use quotation and attribution correctly.
6. Define and assess the role of the news media within the context of history, government, and society.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Liberal Arts and Science, A.A. Degree

Program Design

The Liberal Arts and Science Associate of Arts degree program provides students with a broad background preparing them to move directly into the workforce or for transfer to a bachelor's degree program at another college or university. Students planning to continue their education in a baccalaureate degree major such as English, history, pre-law, French or psychology will be well served by the Liberal Arts curriculum. By following the curriculum guidelines detailed on this page and by working with an advisor to choose courses related to the student's interests, a student can, in a sense, customize his or her own degree program.

Curriculum

Students may enroll in this program full-or part-time. For any student who is not prepared for the required mathematics and English courses, MCC offers a wide range of developmental classes.

At least 62 semester hours of credit are required in this program

General Education Requirements

ENG 111	College Reading and Writing	3
ENG 112	Reading and Writing for Academic Research	3
Gen Ed	Mode 1	3
Gen Ed	Choose one of the following: MATH 106, 108, 111, 135, 190, or 208	3-5
Gen Ed	Natural Science — Choose 2 of the following: CHEM 110 or PHYS 110 or Biology 100 or Geology 110 OR Choose one of the following pairs: BIO 101 and 102; or CHEM 111 and CHEM 112; or PHYS 121 and PHYS 122; or PHYS 131 and PHYS 132	8
Gen Ed	Social Science — Choose one ANTH 101, PSYC 111, or SOC 101	3

Subtotal: 23-25

Liberal Arts and Science Requirements

ENG 120	Introduction to Literature	3
Choose one:	ENG 202, 220, 232, 245, 246, 251, 252, or 271	3
Choose: †	Foreign Language	6-8
Philosophy	Choose one of the following: PHL* 101, 111, 131, or 151	3
History	Choose one of the following: HIST 101 or 102 Choose one of the following: HIST 121, 122, 201, 202, 222, 224, 230, 251, 270, 280, 281, or 284	
Choose one:	ECON 101, GEO* 101 or POL* 111	3

subtotal: 24-26

Electives

Elective	Liberal Arts and Science — Choose 5 or Liberal Arts and Science — Choose 4 and 1 undesignated elective	15
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Total Credits Required: 62-66

Learning Outcomes

Upon successful completion of all program requirements, graduates will

1. Read, write and communicate analytically in forms that involve and document outside sources.
2. Understand the major literary, artistic and philosophical features of western and non-western cultures.
3. Define the concept and function of culture.
4. Demonstrate knowledge of the major developments in western civilization.
5. Understand world events in terms of social scientific theories and paradigms.
6. Demonstrate the ability to conduct meaningful research.
7. Use mathematical tools and technology to create mathematical models.
8. Analyze and solve problems numerically, graphically and symbolically.
9. Use appropriate techniques to gather and analyze data.
10. Apply the scientific method to solving problems.
11. Understand and apply scientific principles.
12. Work with others, including culturally and intellectually diverse peoples; think critically; and gain an appreciation for life-long learning.
13. Demonstrate proficiency in a foreign language at the intermediate level.

Students interested in pursuing an A.A. degree, (an Associate Degree of Arts) in Liberal Arts and Sciences with an humanities or social science emphasis such as: anthropology, economics, English, foreign languages, geography, history, philosophy, political science, psychology, sociology, or speech communication should contact Dr. Heather Ricker-Gilbert, Coordinator of Liberal Arts and General Studies at hricker-gilbert@mcc.commnet.edu.

Students selecting Liberal Arts and Sciences as a major who have 15 credits or fewer may be eligible to enroll in the Guaranteed Admissions Program with the University of Connecticut. Check with the MCC Admissions Office or Counseling Center for further information.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

† *NOTE: The completion of three years of study in a single foreign language at the high school level fulfills the foreign language requirement for the Liberal Arts & Science, A.A. Degree. Some colleges (such as the University of Connecticut) have as a graduation requirement four semesters of study in a single language. It is possible to complete those four semesters of language study at MCC. (Check specific transfer requirements for other colleges and universities).*

See page 104 for common course numbering information.

Liberal Arts and Science, A.S. Degree

Program Design

The Liberal Arts and Science Associate of Arts degree program provides students with a broad background preparing them to move directly into the workforce or for transfer to a bachelor's degree program at another college or university. Students planning to continue their education in a baccalaureate degree major such as English, biology, geology, physics, French or psychology will be well served by the Liberal Arts curriculum. By following the curriculum guidelines detailed on this page and by working with an advisor to choose courses related to the student's interests, a student can, in a sense, customize his or her own degree program.

Curriculum

Students may enroll in this program full-or part-time. For any student who is not prepared for the required mathematics and English courses, MCC offers a wide range of developmental classes.

At least 62 semester hours of credit are required in this program

General Education Requirements

ENG 111	College Reading and Writing	3
ENG 112	Reading and Writing for Academic Research	3
Gen Ed	Mode 1	3
Gen Ed	Choose MATH 190 and MATH 192 or two of the following: MATH 106 or MATH 135; MATH 208; MATH 108 or MATH 111	6-9
Gen Ed	Natural Science — Choose one of the following pairs: BIO 101 and BIO 102, or CHEM 111 and CHEM 112, or PHYS 121 and PHYS 122, or PHYS 131 and PHYS 132	8
Gen Ed	Social Science — Choose one ANTH 101, PSYC 111, or SOC 101	3
Gen Ed	choose one additional course in any mode	3

Subtotal: 29-32

Liberal Arts and Science Requirements

ENG 120	Introduction to Literature	3
Choose one	ENG 202, 220, 232, 245, 246, 251, 252, or 271	3
Philosophy:	Choose one of the following: PHL* 101, 111, 131, or 151	3
History:	Choose one of the following: HIST 101 or 102	3
	Choose one of the following: HIST 121, 122, 201, 202, 222, 224, 230, 251, 270, 280, 281, or 284	3
Choose one	ECON 101, GEO* 101 or POL* 111	3

Subtotal: 18

Electives

Elective	Liberal Arts and Science — Choose 5 or Liberal Arts and Science — Choose 4 and 1 undesignated elective	15
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Total Credits Required: 62-65

Foreign Language Requirements

Although the Associate in Science program does not require the study of a language, the college or university to which a student wishes to transfer may require two or four semesters of a foreign language. These requirements may be met at MCC.

Learning Outcomes

Upon successful completion of all program requirements, graduates will

1. Read, write and communicate analytically in forms that involve and document outside sources.
2. Understand the major literary, artistic and philosophical features of western and non-western cultures.
3. Define the concept and function of culture.
4. Demonstrate knowledge of the major developments in western civilization.
5. Understand world events in terms of social scientific theories and paradigms.
6. Demonstrate the ability to conduct meaningful research.
7. Use mathematical tools and technology to create mathematical models.
8. Analyze and solve problems numerically, graphically and symbolically.
9. Use appropriate techniques to gather and analyze data.
10. Apply the scientific method to solving problems.
11. Understand and apply scientific principles.
12. Work with others, including culturally and intellectually diverse peoples; think critically; and gain an appreciation for life-long learning.

Students selecting Liberal Arts and Sciences as a major who have 15 credits or fewer may be eligible to enroll in the Guaranteed Admissions Program with the University of Connecticut. Check with the MCC Admissions Office or Counseling Center for further information.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Liberal Arts and Science, A.S. Degree

In addition to following the requirements for an AS degree (Associate Degree in Science) you may want to include the following suggested courses as electives in your program of study. Some suggested ways of preparing for a particular course of study are shown below:

BIOLOGY: (For students who want to transfer into bachelor degree programs in ecology, human biology, biotechnology, secondary education, as well as pre-medical, pre-dental, and pre-veterinary studies).

BIO 152, BIO 153, ENGLISH 114, MATH 190, MATH 192, and MATH 108 or MATH 111

It is also recommended that students take BIO 101, BIO 102, **AND** CHEM 111, CHEM 112.

CHEMISTRY: (For students who want to transfer into a bachelor's degree program leading to job opportunities in such fields as industrial chemistry, chemical and pharmaceutical sales and service, education, dentistry and medicine.)

MATH 108 or MATH 111, MATH 201, MATH 293, CHEM 211, CHEM 212, CHEM 111, CHEM 112, PHYS 131, PHYS 132

ENVIRONMENTAL SCIENCE: (For students who want to transfer into bachelor degree programs in agricultural resource management, environmental studies, earth sciences or ecology and evolutionary biology)

EVSC 100, GEOL 110, BIO 101 and BIO 102, GEO* 246, MATH 111, PHYS 131, PHYS 132, CHEM 111, CHEM 112, MATH 190

Note that GEO* 246 and MATH 111 are only suggested; the other courses are more strongly recommended.

MATHEMATICS: (For students who want to transfer into bachelor degree programs in mathematics, computer science, information services or related fields. Mathematics graduates may find positions in statistics, actuarial science, operations research, computer programming, systems analysis and teaching.)

MATH 220, MATH 293, MATH 201, MATH 250, CS 222, PHYS 121, PHYS 122

MUSIC: See requirements for Music Option in Liberal Arts and Science, A.S. Degree

PHYSICS: (For students who want to transfer into bachelor degree majors in physics, engineering physics, physical science or earth science. Physics graduates are prepared to pursue a wide variety of employment opportunities ranging from basic research and development to technical sales and services.)

PHYS 131, PHYS 132, PHYS 133, MATH 293, MATH 201

PRE-MED/PRE-PROFESSIONAL PROGRAM (Medical, Dental, Veterinary, and Optometry): Students are advised to check with the transfer institution and confer with their advisor.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Liberal Arts and Science, A.A. Degree

African/American Studies

In combination with the AA Degree requirements, students who are interested in an academic emphasis in **African American Studies** may want to select the following elective courses:

HUM 201, ANTH 150, MUS 113, SOSC 201, HIST 220, HIST 230, SOC 271

Women's Studies

In combination with the AA degree requirements, students who are interested in an academic emphasis in **Women's Studies** may want to select the following elective courses:

ANTH 150, SOC 261, SOC 262, BIO 155, COMM/SPCH 222, ENG 220, HIST 251

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Management Information Systems

Transfer Option, Accounting and Business Administration, A.S. Degree

Program Design

The Management Information Systems program is offered as an option to our Accounting and Business Administration Transfer Program for students who would like to continue their studies at another college or university to earn a bachelor's degree. This program requires four courses in computer information systems, as well as liberal arts and science courses that students would normally take the first two years at a baccalaureate institution. Students planning to transfer should consult a counselor or faculty advisor about their choice of electives before selecting specific courses.

You should be familiar with the requirements of the institution to which you will transfer credits. We encourage you to select your transfer college or university as early as possible. Also, you should see an advisor before choosing elective courses in this associate degree program because each institution may have specific degree requirements.

Curriculum

Students may enroll in this program full- or part-time. Students should have a sound foundation in mathematics, problem solving and communication skills.

Management Information Systems Requirements

ACCT 101 [†]	Financial Accounting	4
CIS 111 [†]	Introduction to Computers	3
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	Mode 1	3
Gen Ed	Mode 5	3-4

Subtotal: 16-17

ACCT 102	Managerial Accounting	4
ENG 120	Introduction to Literature	3
Gen Ed	MATH 111: Elementary Statistics with Computer Applications	4
Elective ^{††}	CIS/CS Elective	3
Gen Ed	Mode 6	3

Subtotal: 17

CS 213 ^{†††}	Computer Programming: COBOL I <u>or</u>	4
CS 201 ^{†††}	Visual Basic I	3
MATH 120	Topics in Modern Mathematics I: Functions, Graphs and Matrices	3
Gen Ed	PSYC 111: General Psychology	3
COMM/SPCH 213	Effective Speaking	3
Elective ^{††}	CIS/CS Elective <u>or</u>	
CIS 270	Cooperative Education/Work Experience	3

Subtotal: 15-16

CS 214	Computer Programming: COBOL II <u>or</u>	4
CS 202	Visual Basic II	3
CS 225	Systems Design	4
MATH 121	Topics in Modern Mathematics II: Applied Calculus	3
Gen Ed	Mode 3	3
Elective	Social Science	3

Subtotal: 16-17

Total Credits Required: 64-67

Learning Outcomes

Upon successful completion of all Management Information Systems Transfer Option degree program requirements, graduates will

1. Demonstrate a fundamental understanding of a computer's operating system with regard to file management, system tools, and the customization of the computing environment.
2. Demonstrate basic use of computer applications including word processing, spreadsheets, presentation software, and Internet browser software to enhance personal productivity.
3. Identify and apply the major concepts and language requirements to design, code, execute, and debug programs in the required programming languages.
4. Demonstrate the ability to integrate knowledge gained through the curriculum in order to analyze a business problem and design the appropriate hardware and software solutions.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] Eligibility for MATH 101 or higher and ENG 111.

^{††} **Electives:** Choose for a total of **3** credits:
 CIS 106, CST 114 (2 credits each)
 CIS 118 (1 credit each)
 CIS 159, CST 115 (3 credits each)
 CST 271, CST 291 (4 credits each)
 CS 201, CS 202, CS 223 (3 credits each) or
 CIS 270: Cooperative Education/Work Experience (3 credits)

^{†††} Students must take CS 125 as a prerequisite for this course.

See page 104 for common course numbering information.

Manufacturing Engineering Science, A.S. Degree

Program Design

The Manufacturing Engineering Science program is designed to be a broad-based engineering science transfer program that provides a foundation of mathematics and basic science, integrated with program components focusing on introductory manufacturing technology and general education. The program emphasizes the application of mathematics and principles of engineering science to technical manufacturing in order to prepare students for transfer to baccalaureate programs in engineering and engineering sciences with a manufacturing engineering focus. The program also prepares students for employment opportunities in entry and second-level positions in manufacturing and industrial technology fields requiring a combination of technical preparation and a strong general education background.

College of Technology - Technology Pathway Program

The Manufacturing Engineering Science program, through the Connecticut College of Technology Pathways Program, provides for direct entry into baccalaureate industrial and engineering technology programs at Central Connecticut State University. Students may enter CCSU engineering technology programs through the Manufacturing Engineering Science A.S. degree program at MCC and, upon successful completion of the program, continue on to CCSU with a full two years of credit towards a baccalaureate degree in industrial technology or engineering technology. For more information, call Robert Fortier at 860-512-2623.

Curriculum

Students may enroll in this program full- or part-time. Courses are offered during day and evening hours. Preparation for the Manufacturing Engineering Science program includes a high school diploma or equivalent with one year of physics and two years of mathematics including Algebra I and Algebra II. For students not prepared for the required mathematics and English courses, MCC offers a wide range of developmental and preparatory courses. (See *Pre-Technical Education Preparation*, page 27.)

Manufacturing Engineering Science Requirements

MATH 111	Elementary Statistics	4
Gen Ed	MATH 116: Technical Mathematics	3
Gen Ed	CHEM 111: College Chemistry I	4
ENGR 101	Engineering Drawing Interpretation	3
Gen Ed	ENG 111: College Reading and Writing	3

Subtotal: 17

MATH 150	Precalculus Mathematics	4
PHYS 121	General Physics I	4
CIS 111	Introduction to Computers	3
QA 100	Statistical Process Control	3
Gen Ed	COMM/SPCH 213: Effective Speaking	3

Subtotal: 17

MATH 190 [†]	Analytic Geometry and Calculus I	5
PHYS 122 [†]	General Physics II	4
MFG 111	Manufacturing Materials and Processes I	3
Gen Ed	SOC 101: Introduction to Sociology	3
Gen Ed	Mode 1	3

Subtotal: 18

ENGR 211	Statics	3
ENGR 112 [†]	Electricity/Electronics	4
MFG 112	Manufacturing Materials and Processes II	3
CAD 101	Computer-Aided Design	3
Gen Ed	PSYC 240: Organizational Behavior	3

Subtotal: 16

Total Credits Required: 68

Learning Outcomes

Upon successful completion of all Manufacturing Engineering Science degree program requirements, graduates will

1. Demonstrate team-oriented human skills that permit effective participation in multicultural work and social environments.
2. Apply appropriate mathematical and scientific principles to manufacturing applications.
3. Demonstrate proficiency in engineering fundamentals to analyze manufacturing engineering problems and make appropriate decisions.
4. Assist in the design process to meet effective production objectives.
5. Possess knowledge of engineering materials and be able to demonstrate competency in their selection and utilization.
6. Apply knowledge and skills to develop, interpret, and select appropriate manufacturing processes.
7. Maintain a practical knowledge of state-of-the-art hardware and software in support of manufacturing systems.
8. Be aware of and use available information and data sources in support of the manufacturing systems.
9. Apply skills and knowledge to effectively and efficiently plan, organize, implement, measure, and control manufacturing processes.
10. Demonstrate a thorough knowledge and understanding of engineering graphics as well as conventional drafting practices, such as orthographic and isometric projection, section, detail, auxiliary views, descriptive geometry, as well as geometric dimensioning and tolerancing (GD&T) basics.
11. Demonstrate a high level of proficiency in the use of state-of-the-art computer-aided design (CAD) software and be able to respond positively to continuous software revisions and upgrades.
12. Demonstrate a thorough understanding of 2-dimensional (2-D) and isometric CAD concepts, procedures, and applications.
13. Apply knowledge of computer applications in integrating computer-aided manufacturing (CAM), computer numerical control (CNC), CAD, spreadsheets, graphs, and word processing for manufacturing engineering and technology documentation and support purposes.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] These courses must be included in the 25 percent minimum course requirements for the degree through course work at the College. (See page 16.)

See page 104 for common course numbering information.

Marketing, A.S. Degree

Program Design

The Marketing associate degree program is for students who wish to enter managerial or proprietary positions in marketing. To complete this program, you will take courses in marketing, business, accounting, and general education.

Students interested in transferring to earn a bachelor's degree should register in the Accounting and Business Administration Transfer Program.

Curriculum

Students may enroll in this program full- or part-time. *Note: All business courses numbered 100 or higher require students to be eligible for ENG 111 except BUS 111. All accounting courses numbered 100 or higher require students to be eligible for ENG 111 and MATH 101 or higher.*

Marketing Requirements

ACCT 101	Financial Accounting	4
BUS 101	Business Law I	3
BUS 111	Business Environment	3
Gen Ed	ENG 111: College Reading and Writing	3
QM 110	Quantitative Methods for Business	3

Subtotal: 16

ACCT 102	Managerial Accounting	4
BUS 102	Business Law II	3
BUS 214	Managerial Communications	3
Gen Ed	ECON 102: Microeconomics	3
Gen Ed	MATH 110: Quantitative Literacy	3

Subtotal: 16

ACCT 105	Accounting & Business Applications Software	3
BUS 121	Principles/Methods of Marketing I	3
BUS 221	Sales and Techniques of Selling	3
CIS 106	Windows	2
Gen Ed	PSYC 111: General Psychology	3
Gen Ed	Mode 5	3-4

Subtotal: 17-18

BUS 122	Principles/Methods of Marketing II	3
BUS 231	Basic Advertising Principles	3
BUS 252	Retailing	3
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3
Gen Ed	Mode 1	3

Subtotal: 15

Total Credits Required: 64-65

Learning Outcomes

Upon successful completion of all Marketing degree program requirements, graduates will

1. Prepare and interpret financial statements and utilize accounting for managerial decisions.
2. Understand and discuss financial issues dealing with the environment of managerial finance; including working capital management, short-term financing, capital markets, and the theory of the value of the firm (risk, leverage, cost of capital).
3. Generally understand our legal system and be able to apply principles of contract law, sales law under Article II of the Uniform Commercial Code, and the law of agency to business situations.
4. Discuss partnership and corporation law, property, wills and estates, commercial paper, the bank collection process, secured transactions and creditors' rights, and government regulation of business.
5. Analyze principles, techniques, and major functions (planning, organizing, leading and controlling) of business enterprise management.
6. Understand marketing methods and institutions, including analysis and interrelationship of the marketing mix.
7. Demonstrate computer skills appropriate to his/her focus area including word processing, electronic spreadsheet, database management, general ledger accounting system, and presentation software.
8. Use the Internet for business purposes, including research, marketing, and stock market analysis.
9. Demonstrate an understanding of how the United States economic system is organized, how it functions and how it impacts the global economy.
10. Successfully enter the business world in the field of marketing.
11. Demonstrate proficiencies in reading, writing, listening, presentation and analytical skills.
12. Work with others, including culturally and intellectually diverse people; think critically; and gain an appreciation for life-long learning.
13. Rationalize and present solutions to problems using marketing knowledge and knowledge from social sciences, arts, literature, mathematics and science.
14. Develop sound ethical, philosophical and moral professional characteristics.
15. Demonstrate a responsible attitude in relationships with employers, peers and toward the working environment.
16. Understand market theory and its applications to product planning, price determination, government regulation, and distribution cost analysis.
17. Demonstrate advertising strategy, tactics and techniques, including media selection, ad preparation, market research methods, and program evaluation.
18. Apply and demonstrate the principles, methods and techniques of selling and retailing.
19. Demonstrate an understanding of the interrelationships between marketing and all other areas within a business including working with other departments to achieve overall strategic goals.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Microcomputer Option, Computer Information Systems, A.S. Degree

Program Design

The Computer Information Systems associate degree, Microcomputer Option program prepares students for employment in entry-level positions where the emphasis in computing is the desktop environment. This program provides course work in hardware, varied system and applications software, and principles of programming as they relate to microcomputing.

Students interested in transferring to another institution to earn a bachelor's degree in management information systems should enroll in the Management Information Systems Transfer program.

Curriculum

The following curriculum may be completed on a full- or part-time basis. We urge students, especially those attending part-time, to work closely with a faculty member or advisor to insure they are taking the correct computer information systems courses and selecting the electives most appropriate for their goals.

Students with no keyboarding experience should take BOT 100A: Keyboarding concurrently with their first CIS course.

Microcomputer Option Requirements

CIS 106	Windows	2
CST 110	Introduction to Computer Technology	3
CS 125	Programming Logic & Design with C++	3
BOT 124	Microsoft Word for Windows	3
Gen Ed	ENG 111: College Reading & Writing	3
Gen Ed	COMM 213/SPCH 213: Effective Speaking	3

Subtotal: 17

ENG 114	Technical Writing or	
BUS 214	Managerial Communication	3
CST 114	Exploring the Internet	2
CIS 159	Database Management: Access	3
CIS 166	Application Software: Excel	3
Gen Ed	ECON 102: Microeconomics	3
CS 201	Visual Basic I or	
CS 223	Programming in C++	3

Subtotal: 17

CIS 118	Presentation Software: PowerPoint	1
CST 271	Network Theory & Application	4
CST 291	Computer Hardware Maintenance	4
CS 202	Visual Basic II or	
CS 228	Advanced Programming in C++	3
Gen Ed	MATH 111: Elementary Statistics with Computer Applications	4

Subtotal: 16

Elective [‡]	Programming Elective	6
CST 115	Building Web Pages	3
Gen Ed	Mode 5	3
Gen Ed	Mode 6	3
Gen Ed	Mode 1	3

Subtotal: 18

Total Credits Required: 68

Note: Students may elect to substitute CIS 270: Cooperative Education/Work Experience for any equivalent CIS credit course with prior departmental approval.

Learning Outcomes

Upon successful completion of all Microcomputer Option degree program requirements, graduates will

1. Demonstrate an understanding of a computer's operating system with regard to file management, system maintenance, system tools, and the customization of the computing environment.
2. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
3. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
4. Demonstrate effective use of computer applications including word processing, spreadsheets, presentation software, and database management software.
5. Demonstrate the ability to use and configure Internet browsers, E-mail, search engines, and advanced Internet tools.
6. Identify and apply the major concepts and language requirements to design, code, execute, and debug programs in the required programming languages.
7. Differentiate and apply the basic technologies used in Local and Wide Area Networks.
8. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician's point of view.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[‡] **Programming Elective:** select **two** of the following:

CS 201:	Visual Basic I	3
CS 202:	Visual Basic II	3
CS 259:	Database Management - Advanced Access with VBA	3
CAD 101:	Computer-Aided Design	3
CS 223:	Programming in C++	3
CS 224:	Programming in Java	3
CS 227:	Advanced Java	3
CS 230:	Database Concepts and Applications with Oracle	3
CS 240:	Data Structures	3
CST 130:	Fundamentals of Operating Systems	4
CST 231:	Computer Operating System Workstation	4
CST 232:	Computer Operating System Server	4

See page 104 for common course numbering information.

Multimedia Option, Graphic Design, A.S. Degree

Program Design

The purpose of the Graphic Design Multimedia Option is:

- to provide a multimedia transfer program in the area of digital design with an emphasis on the computer as a tool for the creation of animated and interactive presentation;
- to offer a degree program for those considering an entry level position in fields related to digital composition (animation, interactive programming, digital illustration).
- to provide greater technical knowledge of the creative visual arts as they apply to multimedia design and production.

The program is structured to equip students with a sound foundation in technical skills, graphic design concepts, aesthetics, terminology and vocabulary and to provide awareness of the application of creative and critical thinking in the use of technical knowledge. A strong emphasis has been placed on the use of the computer as a production and composing tool. For more information call Program Coordinator Ed Hogan at 860-512-2672.

The course of study demands students' time and dedication, and will provide them with transfer and career choices based upon ability and achievement.

Multimedia Option Requirements

Gen Ed	ENG 111: College Reading and Writing	3
FA 210	Computer Graphics	3
FA 125	Design	3
Gen Ed	FA 121 : Drawing	3
Elective	Social Science	3

Subtotal: 15

Gen Ed	ENG 120 : Introduction to Literature	3
FA 105	History of 20th Century Art	3
COMM 210	Broadcast/TV Production	4
Gen Ed	HIST 101: Western Civilization	3
FA 211	Computer Graphics II	3

Subtotal: 16

COMM 176	Video/Filmmaking	3
FA 205	Graphic Design I	3
Gen Ed	Mode 3	3
FA 251	Computer Animation	3
MM 245	Web Page Design	3

Subtotal: 15

FA 206	Graphic Design II	3
FA 252	Advanced Computer Animation	3
Elective	liberal arts & science	3
Gen Ed	MATH 110: Quantitative Literacy	3
Gen Ed	Mode 5	3
Elective	studio <u>or</u>	
FA 270	Cooperative Education/Work Experience	3

Subtotal: 18

Total Credits Required: 64

Learning Outcomes

Upon successful completion of all Multimedia Option, Graphic Design degree program requirements, graduates will

1. Demonstrate an understanding and appreciation of graphic design as a form of communication and art.
2. Demonstrate an ability to use design processes and principles to create visual products that convey a specific message to a targeted audience.
3. Demonstrate creative thinking skills and strategies and use problem-solving techniques across a wide range of media.
4. Demonstrate an understanding of how creative processes and skills are integrated with printing and other reproduction processes found in the graphic design field.
5. Demonstrate an understanding of non-print distribution systems such as CD-ROM, computer networks and the Internet.
6. Demonstrate an awareness of the varied career paths within the graphics and media industries including, but not limited to, art direction, illustration, project design, production art, graphic design and media director, interactivity interface design, and digital video production and editing.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Multimedia Studies, A.A. Degree

Program Design

The purpose of the Multimedia Studies program is:

- to provide a multimedia transfer program in the area of digital design with an emphasis on the computer as a tool for the creation of animated and interactive presentation;
- to offer a degree program for those considering an entry level position in fields related to digital composition (animation, interactive programming, digital illustration, three-dimensional modelling, digital video production).
- to provide greater technical knowledge of the creative visual arts as they apply to multimedia design and production.

The program is structured to equip students with a sound foundation in technical skills, design concepts, aesthetics, terminology and vocabulary and to provide awareness of the application of creative and critical thinking in the use of technical knowledge. A strong emphasis has been placed on the use of the computer as a production and composing tool. For more information call Program Coordinator Ed Hogan at 860-512-2672.

The course of study demands students' time and dedication, and will provide them with transfer and career choices based upon ability and achievement.

Multimedia Studies Requirements

Gen Ed	ENG 111: College Reading and Writing	3
HIST 101	Western Civilization	3
Gen Ed	FA 125: Design	3
FA 210	Computer Graphics	3
COMM 176	Video/Filmmaking or	3
COMM 210	Broadcast/TV Production	4

Subtotal: 15-16

Gen Ed	ENG 120 : Introduction to Literature	3
Gen Ed	MATH 110: Quantitative Literacy	3
FA 105	History of 20th Century Art	3
FA 211	Computer Graphics II	3
FA 251	Computer Animation I	3
Gen Ed	Mode 6	3

Subtotal: 18

MM 201	Introduction to 3D Modelling	3
FA 252	Advanced Computer Animation	3
MM 205	Digital Video/On-Line Editing	3
Gen Ed	Mode 5	3-4
Gen Ed	Mode 3	3

Subtotal: 15-16

MM 299	Special Topics	3
MM 245	Web Page Design	3
Elective [†]	studio (computer)	3
Elective [†]	studio (computer)	3
Elective	liberal arts & science	3

Subtotal: 15

Total Credits Required: 63-65

Learning Outcomes

Upon successful completion of all Multimedia Studies degree program requirements, graduates will

1. Demonstrate practical skills in computer-based multimedia production including animation, 3D modelling, digital video and interactive design and production.
2. Demonstrate an ability to plan multimedia and interactive projects and produce all the elements involved in such projects (graphics, sound, animations, and video).
3. Demonstrate an awareness of a variety of software used in multimedia production and the ways that this software can be integrated in the development of projects.
4. Use their training to pursue employment in digital media development, including but not limited to digital animation, 3D modeling, digital sound engineering, digital video production and editing, CD-ROM and computer game development, digital graphic arts and special effects production.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] Computer studio courses include Computer Graphics, Advanced Computer Graphics, Computer Animation, Advanced Computer Animation, 3D Modelling and Digital Video. These electives will permit a student to continue their computer training in the direction of their choice.

See page 104 for common course numbering information.

Music Option, Liberal Arts and Science, A.S. Degree

Program Design

The Music Option to the Liberal Arts and Science program has two goals: preparing students to meet the demands of the music profession and enabling the nonprofessional to enjoy a more rewarding life as a serious lover of music.

Courses in the music curriculum offer a thorough preparation in music fundamentals, jazz and popular theory, history (classical, contemporary and jazz), and performance. Individualized study with professional instrumental and vocal instructors is an important part of the curriculum. Each student plans his/her selection of courses with a member of the music faculty.

Special arrangements afford students the option of earning course credits at MCC or the Hartford Camerata Conservatory and apply that credit toward the A.S. degree at Manchester Community College. While completing the degree requirements for an associate degree, students receive support and advisement should they choose to transfer to another college or university to earn a bachelor's degree.

Curriculum

Music students must complete the following curriculum to earn an associate degree. Students may enroll full- or part-time.

Music Option Requirements

Gen Ed	ENG 111: College Reading and Writing	3
MUS 111	History and Appreciation I	3
MUS 121 [†]	Chorus or	
MUS 123 [†]	Chamber Music/Jazz Ensemble	2
MUS 131	Private Music Lessons	1-2
MUS 211 ^{††}	Fundamentals	3
Gen Ed	Mode 5	3

Subtotal: 15-16

Gen Ed	ENG 120: Introduction to Literature	3
MUS 112	History and Appreciation II or	
MUS 251:	Music History I: the Classical Period	3
MUS 122 [†]	Chorus or	
MUS 124 [†]	Chamber Music/Jazz Ensemble	2
MUS 132	Private Music Lessons	1-2
MUS 201 ^{††}	Music Harmony & Ear Training I	3
Gen Ed	Mode 6	3

Subtotal: 15-16

MUS 113	Today's Music I or	
MUS 114:	Today's Music II	3
MUS 202 ^{††}	Music Harmony & Ear Training II with Keyboard Lab	4
MUS 221 [†]	Chorus or	
MUS 223 [†]	Chamber Music/Jazz Ensemble	2
MUS 231	Private Music Lessons	1-2
Gen Ed	MATH 110: Quantitative Literacy	3
Gen Ed	Mode 6	3

Subtotal: 16-17

MUS 203 ^{††}	Music Harmony & Ear Training III with Keyboard Lab	4
MUS 222 [†]	Chorus or	
MUS 224 [†]	Chamber Music/Jazz Ensemble	2
MUS 232	Private Music Lessons	1-2
Elective	Natural Science	4
Gen Ed	Mode 1	3
PHL* 101	Introduction to Philosophy	3

Subtotal: 16-18

Total Credits Required: 63-67

Learning Outcomes

Upon successful completion of all Music Option degree program requirements, graduates will

1. Demonstrate an historical cross-cultural awareness and appreciation of Western European and American Contemporary music.
2. Demonstrate skills and techniques that reflect an understanding of the theoretical aspect of music including: an understanding of the fundamentals of music; exploration and development of voice leading principles; ear training, sight singing, rhythmic, melodic and harmonic dictation; keyboard skills and accompaniment techniques.
3. Demonstrate performance skills in solo and ensemble group presentations.
4. Demonstrate technical facility and knowledge of standard repertoire for specified vocal or instrumental medium (e.g., voice, piano, saxophone).
5. Demonstrate an understanding of music that prepares them for further music study.
6. Demonstrate proficiency in a foreign language at the intermediate level (A.A. degree only).

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] Voice students should choose chorus sequence MUS 121, MUS 122, MUS 221, and MUS 222. Instrumental students should choose instrumental sequence MUS 123, MUS 124, MUS 223, and MUS 224.

^{††} Students who have not studied piano are recommended to take a beginning piano class (MUS 215: Beginning Piano) or a comparable course before taking the theory sequence (MUS 211, 201, 202 and 203).

See page 104 for common course numbering information.

Occupational Therapy Assistant, A.S. Degree

Program Design

The Occupational Therapy Assistant associate degree program enables the graduate to treat patients who are impaired by a physical illness or injury, an emotional disorder, a developmental disability, or the aging process. Working under the supervision of an occupational therapist, an occupational therapy assistant uses activities and modalities as treatment to help people gain optimal function in their everyday life tasks. Specific services that an occupational therapy assistant provides may include training in activities of daily living, fabrication of splints, adapting home and work environments and tools, and therapeutic use of crafts and games.

Scholastic Preparation and Admission Process

If you are a high school graduate or hold a state equivalency certificate, you may submit an official application to the College Admissions Office. Admission to a Health Career Program requires a separate application. You may request this application by contacting the Admissions Office or by calling 860-512-3210 or by contacting the Health Careers secretary at 860-512-2728.

To qualify for admission to the Occupational Therapy Assistant Program students must have a grade point average at above 2.5. It is suggested that interested students meet with the Occupational Therapy Program Coordinator to review a learning plan tailored to the individual needs of the student. The OTA Program Coordinator may be reached at 860-512-2717.

Curriculum

Because of the flexible nature of the program, students may select a full-time or part-time plan of study. Courses with an OTA designator are offered only during the day. Students with prior college credit may complete the program in a three-semester sequence. All coursework must be completed with a grade of C or better and a GPA of 2.5 must be maintained throughout the program. The clinical semester, which is offered both semesters, provides a four-month, full-time, supervised learning experience with a focus on psychosocial, physical, and developmental areas of practice. The Occupational Therapy Assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's phone number is 301-652-AOTA. Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). When you apply to sit for the certification exam, you will be asked to answer questions related to the topic of felony convictions. For further information on these limitations, contact NBCOT. Connecticut requires a license in order to practice occupational therapy and the license is based on the results of the NBCOT Certification Examination.

Occupational Therapy Assistant Requirements

OTA 101	Introduction to Occupational Therapy	3
OTA 120	Human Neuroscience with Kinesiology Lab	4
Gen Ed	BIO 112: Human Biology with Lab [†]	4
CS 106	Windows or	2
CIS 102	Getting Acquainted with the Personal Computer	1
Gen Ed	PSYC 111: General Psychology ^{††}	3
PSYC 124	Developmental Psychology [†] (through the life span)	3

Subtotal: 18-19

Gen Ed	Mode 1	3
OTA 102	Occupational Therapy with Children	3
OTA 102L	Treatment Modalities (<i>Children</i>)	1
OTA 112	Occupational Therapy with Adults	3
OTA 112L	Treatment Modalities (<i>Adults</i>)	1
OTA 122	Occupational therapy with the Elderly	3
OTA 122L	Treatment Modalities (<i>Elderly</i>)	1
OTA 232	Principles of Clinical Management	3
OTA 106	Level I Advanced Fieldwork	0

Subtotal: 18

Gen Ed	COMM 213/SPCH 213: Public Speaking	3
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	MATH 110: Quantitative Literacy	3
OTA 220	Group Approach in Occupational Therapy	3
Gen Ed	SOC 101: Introduction to Sociology	3
SOC 260	Medical Sociology or	
ANTH 220	Health Healing and Culture	3

Subtotal: 18

OTA 242	Level II Fieldwork	11
OTA 244	Advanced Seminar in Occupational Therapy	1

Subtotal: 12

Total Credits Required: 66-68

These courses are recommended for students who plan to transfer to a professional level occupational therapy program.

BIO 152	Human Anatomy and Physiology I	4
BIO 153	Human Anatomy and Physiology II	4
MATH 111	Elementary Statistics with Computer Application	4
CIS 111	Introduction to Computers	3

Learning Outcomes

Upon successful completion of all Occupational Therapy Assistant degree program requirements, graduates will

1. Sit for the National Certification Exam.
2. Be employed in a health service occupation that meets the manpower needs of individuals, the community and the state.
3. Demonstrate the interpersonal skills necessary to function as a Certified Occupational Therapy Assistant.
4. Comprehend the scope of Occupational Therapy practice.
5. Apply principles in analysis and application of occupational therapy treatment in the spectrum of human occupation.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] Must have been taken within last five years.

^{††} Must have been taken within last ten years.

See page 104 for common course numbering information.

Paralegal, A.S. Degree

Program Design

A paralegal or legal assistant is a person, qualified through education, training or work experience, who is employed or retained by a lawyer, law office, governmental agency or other entity. The paralegal performs specifically delegated, substantive legal work, for which a lawyer is responsible.

Paralegals may be asked to conduct research and prepare memoranda; to draft pleadings, deeds or contracts; to interview clients or witnesses; to prepare answers to interrogatories; or to digest depositions. They may prepare inventories, accounts and tax returns in connection with estates and trusts; perform real estate title searches and UCC searches; calendar and track important deadlines; or organize and maintain client files. Paralegals may not give legal advice or engage in the unauthorized practice of law.

The Paralegal associate degree program includes specialized courses in the paralegal profession as well as related courses in business and liberal arts. An option in the program is a cooperative education/work experience course in which students gain practical experience in a legal setting while earning academic credit.

The MCC Paralegal Association is an active student club that offers seminars throughout the year and distributes a newsletter to members.

The Paralegal program has been approved by the American Bar Association since 1984. It is a member of the American Association for Paralegal Education.

Curriculum

The Paralegal program is primarily an evening program of study, offering legal courses during the academic year. Many students work full time while attending classes at night. Students should note that not all courses are offered every semester, and only some courses are offered in the day. Part-time students should see a counselor for suggested course sequencing.

Note: All legal courses, and POL* 120: Introduction to Law, require students to be eligible for ENG 111, or permission of the instructor.

Paralegal Requirements

POL* 120	Introduction to Law	3
LEGL 110	Legal Ethics and Professional Responsibility	1
Gen Ed	ENG 111 : College Reading and Writing	3
BUS 101	Business Law I	3
Gen Ed	POL* 111: American Government <u>or</u> POL* 112: State and Local Government	3
Elective	Free	3

Subtotal: 16

LEGL 112	Legal Research	3
LEGL 221	Litigation	3
Gen Ed	Mode 3	3
Gen Ed	Mode 4	3
LEGL 220 [†]	Computer Applications in Law	4

Subtotal: 16

Elective ^{††}	Legal Elective	3
LEGL 231	Wills, Trusts and Estate Administration	3
ACCT 101	Financial Accounting	4
Gen Ed	Mode 6	3
LEGL 211	Business Organizations	3

Subtotal: 16

LEGL 207	Real Estate Transactions	3
Gen Ed	Mode 1	3
Gen Ed	Mode 5	3-4
Elective ^{††}	Legal Elective	3
Elective	Free	3

Subtotal: 15-16

Total Credits Required: 63-64

Learning Outcomes

Upon successful completion of all Paralegal degree program requirements, graduates will

1. Understand the proper role of the legal assistant in the delivery of legal services to the public, and the ethical rules that govern the conduct of the legal profession.
2. Understand how to analyze a fact situation, identify legal issues, research these issues, and prepare memoranda of law.
3. Prepare legal documents such as deeds, mortgages, wills, trusts, pleadings, probate forms and business documents and agreements for review by the supervising attorney.
4. Perform law office management and administrative tasks, through the establishment and implementation of office policy and procedures, and the development of computer competencies for maximum efficiency.
5. Approach new problems and subject matter in an organized and efficient manner, with an understanding of the importance and responsibility placed on the paralegal.
6. Demonstrate an understanding of artistic and literary expression, social issues, and scientific hypotheses.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] Students without a strong foundation in computer skills should take CIS 111 or BOT 130 prior to enrolling in LEGL 220.

^{††} **Legal Elective — Choose 2**
LEGL 120, 205, 212
LEGL 215, 222
LEGL 225/CJ 225
LEGL 226/CJ 226
LEGL 270

See page 104 for common course numbering information.

Physical Therapist Assistant, A.S. Degree

Program Design

The Physical Therapist Assistant (PTA) associate degree program prepares students to function in health care settings as an entry level practitioner within the boundaries and scope of practice of a physical therapist assistant and under the supervision of a physical therapist. PTA's practice in hospitals, school systems, private offices, home health agencies, industry, rehabilitation hospitals and nursing homes.

The program is offered through a collaborative arrangement between Capital Community College, Housatonic Community College, Manchester Community College, Naugatuck Valley Community College, Northwestern Community College, and Tunxis Community College. The A.S. degree is awarded by Manchester Community College. The two year course of study begins in January and includes a minimum of 67 credits in science, mathematics, psychology, social sciences and humanities. Seven physical therapy courses, which have a strong foundation in the sciences and in professional practice standards, are also required. Twelve credits are earned during the final semester in clinical practicums. These are done in physical therapy clinics that are affiliated with this PTA program. All physical therapy classes are held during the day at Naugatuck Valley Community College in Waterbury and the clinical practicums require 40 hours of attendance weekly throughout that semester. Non-professional courses will be taken at Manchester Community College.

Scholastic Preparation and Admissions Process

The PTA Program relies on a selective admissions process which uses specific admissions criteria. These criteria are available through the admissions office in each college and include course work in algebra, chemistry or physics, and college level anatomy and physiology. Interested candidates will be expected to have a history of academic success, particularly with science courses. When the applications are evaluated, only the strongest candidates will be considered for an interview by the Admissions Committee. The student will need to demonstrate the skills necessary to become a PTA. The deadline for application is October 1 and the classes will begin in January each year. For more information about admission into this program, contact the MCC Health Careers Office in the Learning Resource Center, 860-512-2728.

Students who do not meet the program entrance requirements should select appropriate courses from the Pre-Allied Health Program, an access program that provides courses and guidance to prepare the student for a career in the health field. (See page 27.)

Accreditation

One requirement for registration or licensure to work as a PTA is graduation from a program of education accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association. The Physical Therapist Assistant Program is accredited by Connecticut's Board of Governors for Higher Education and by the Commission on Accreditation in Physical Therapy Education/APTA, 1111 North Fairfax St., Alexandria, VA, 22314-1478, (703) 684-2782.

Physical Therapist Assistant Requirements

BIO 153	Human Anatomy and Physiology II	4
ENG 111	College Reading and Writing	3
PSYC 111	General Psychology	3
PTA* 120	Introduction to Physical Therapy	3
PTA* 125	Physical Therapy for Function	4

Subtotal: 17

PTA* 220	Introduction to the Physical Therapy Clinic	1
		Subtotal: 1

COMM 213/SPCH 213	Effective Speaking	3
ENG 120	Introduction to Literature	3
Gen Ed	Mathematics	3-4
PTA* 230	Physical Agents in Physical Therapy	4
PTA* 235	Kinesiology for Rehabilitation	4

Subtotal: 17-18

Elective	Social Science	3
Gen Ed	Fine Arts	3
PTA* 250	Therapeutic Exercise	5
PTA* 253	Pathophysiology for Rehabilitation	3
PTA* 258	PTA in the Healthcare Arena	2

Subtotal: 16

PTA* 260	Physical Therapy Seminar	2
PTA* 262	PTA Internship II	5
PTA* 265	PTA Internship III	5

Subtotal: 12

Total Credits Required: 63-64

Learning Outcomes

Upon successful completion of all Physical Therapist Assistant program requirements, graduates will

1. Sit for examination for state licensure/registration as a physical therapist assistant.
2. Perform physical therapy interventions under the supervision of a physical therapist.
3. Accurately obtain patient information through data collection.
4. Demonstrate accurate problem-solving abilities when working as a physical therapist assistant.
5. Competently communicate with physical therapists, patients, families and other health care providers.
6. Effectively provide education to patients, families and other caregivers.
7. Produce documentation supporting physical therapy services.
8. Demonstrate behaviors that comply with appropriate statutes and with the ethical standards established by the American Physical Therapy Association.
9. Competently function within an interdisciplinary health care team.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Respiratory Care, A.S. Degree

Program Design

The Respiratory Care associate degree program provides training in respiratory care, a health care specialty that concentrates on the areas of prevention, treatment, management and rehabilitation of people with lung disorders. Respiratory therapists are involved in a variety of life-saving situations, working side-by-side with nurses, doctors and other health care providers and treating patients ranging in age from the newborn to the elderly. Using sophisticated equipment, therapists help people with such diseases as asthma, bronchitis and emphysema. Respiratory therapists are regarded as experts on the respiratory and cardiac systems and are often called upon for advice and help in deciding which course of care to prescribe.

Scholastic Preparation and Admission Process

The Respiratory Care Program relies on a selective admission process, which uses specific admissions criteria. These criteria are available through the admissions office and the health careers office. The admission criteria require that the students are eligible for the equivalent of MCC's MATH 102, ENG 111 and BIO 152. Interested candidates will be expected to have a history of academic success, with the completion of a lab science course. Admission to the Respiratory Care Program requires a separate application. Applications are accepted on an on-going basis during the year prior to the September of the year in which the student hopes to be accepted. Applications will be accepted until the class fills. Prospective students are encouraged to apply early. Complete information on specific criteria for acceptance and the admission process is available from the Admissions Office by calling 860-512-3210 or from the program coordinator at 860-512-2728. A tour of one of the hospital affiliates is strongly recommended. Students will need to demonstrate the skills necessary to become a Respiratory Therapist; technical standards for the program are available upon request.

Students who do not meet the program entrance requirements should select appropriate courses from the Pre-Allied Health Program, an access program that provides courses and guidance to prepare the student for a career in the health field. (See page 27.)

Accreditation

The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon recommendation of the Committee on Accreditation for Respiratory Care (CoARC). For information write to: Committee on Accreditation for Respiratory Care, 1248 Hardwood Road, Bedford, Texas 76021-4244 or phone (817) 283-2835.

Curriculum†

The program begins each September and continues through two years, including the summer semester. Classes with an RC designation and clinical experience are offered during the day. Beginning with the second semester of the program, students will train at the hospitals every week in conjunction with classes held at the College. Beginning with the second year, the clinical component requires full-time study. Hospital affiliates include Baystate Medical Center, Hartford Hospital, St. Francis Hospital and Medical Center, Manchester Memorial Hospital, New Britain General Hospital and the Hospital for Special Care. All hospital training is supervised by trained clinical instructors. After graduating from the program, students are eligible to take the entry level examination offered by the National Board for Respiratory Care.

A physical examination and an immunization record are required of all students prior to beginning clinical rotations. Students are responsible for hospital parking fees; uniforms; clinical supplies, e.g. stethoscopes, assessment examinations; and miscellaneous expenses.

Respiratory Care Requirements

Gen Ed	BIO 152: Human Anatomy and Physiology I	4
Gen Ed	MATH 110: Quantitative Literacy	3
Gen Ed	ENG 111: College Reading & Writing	3
RC 201	Clinical Practice I	1
RC 221	Respiratory Care I	3
RC 241	Ventilation Therapy I	3

Subtotal: 17

Gen Ed	BIO 153: Human Anatomy and Physiology II	4
RC 202	Clinical Practice II	1
RC 211	Applied Pharmacology	3
RC 222	Respiratory Care II	3
CHEM 110††	Elements of Chemistry	4

Subtotal: 15

COMM 213/SPCH 213	Effective Speaking	3
RC 203	Clinical Practice III	1
RC 242	Ventilation Therapy II	3

Subtotal: 7

Gen Ed	Mode 6	3
PHYS 110	Elements of Physics or	
PHYS 111	Physics and the Human Body	4
RC 204	Clinical Practice IV	2
RC 251	Advanced Respiratory Care I	3
RC 282	Clinical Application I	3

Subtotal: 15

BIO 141	Microbiology	4
Gen Ed	Mode 1	3
RC 205	Clinical Practice V	2
RC 261	Advanced Respiratory Care II	3
RC 283	Clinical Application II	2

Subtotal: 14

Total Credits Required: 68

Learning Outcomes

Upon successful completion of all Respiratory Care degree program requirements, graduates will

1. Sit for the National Board for Respiratory Care (NBRC) entry level examination for Certified Respiratory Therapist (CRT).
2. Sit for the NBRC Advanced Level Examination for Registered Respiratory Therapist (RRT).
3. Demonstrate the ability to comprehend, apply and evaluate information relevant to their role as an advanced level respiratory therapist.
4. Demonstrate technical proficiency in the skills necessary to fulfill the role of advanced level respiratory therapist.
5. Demonstrate professional behavior consistent with the practice of respiratory care.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

† AH 090 is recommended as a preparation for this program.

†† Students planning to transfer to a B.S Respiratory Care Program are encouraged to take CHEM 111 and CHEM 112.

See page 104 for common course numbering information.

Social Service, A.S. Degree

Program Design

The Social Service associate degree program is designed to prepare students for diverse employment opportunities and to provide a foundation for further academic pursuit. Additionally, the program includes field placement opportunities which provide students with "hands-on" exposure to the helping professions.

Curriculum

Students may enroll in this program full- or part-time. They can begin the program any semester and include field work at off-campus sites as part of their program.

Social Service Requirements

Gen Ed	ENG 111: College Reading and Writing	3
HS 101	Introduction to Human Services	3
Gen Ed	PSYC 111: General Psychology	3
Gen Ed	SOC 101: Introductory Sociology	3
Gen Ed	Mode 5	3-4

Subtotal: 15-16

ENG 112	Reading & Writing for Academic Research	3
HS 152	Work with Individuals and Families	3
PSYC 124	Developmental Psychology	3
Gen Ed	Mode 4	3-4
Elective	Social Science	3

Subtotal: 15-16

Gen Ed	ENG 120: Introduction to Literature	3
HS 201	Work with Groups	3
HS 291	Human Services Field Experience I	3
POL* 112	State and Local Government	3
Gen Ed	Mode 1	3

Subtotal: 15

HS 252	Work with Agencies and Communities	3
HS 292	Field Experience II <u>or</u>	
SOSC 270	Cooperative Education/Work Experience	3
Elective	Undesignated Elective — Choose 2	6
Elective	Social Science Elective	3

Subtotal: 15

Total Credits Required: 60-62

Learning Outcomes

Upon successful completion of all Social Service degree program requirements, graduates will

1. Explain the history of human service movements.
2. Demonstrate knowledge of current human services theories.
3. Identify ethical and legal issues related to human services.
4. Demonstrate knowledge of the language, terms and concepts used in the helping professions.
5. Apply a basic knowledge of assessment, planning, contracting, interviewing, intervention and evaluation.
6. Develop an understanding of professional ethics relating to human services work.
7. Describe a variety of styles and methods of working with individuals, couples, and families.
8. Describe group process and structure and the various roles assumed by individuals in groups.
9. Demonstrate an understanding of systems theory, the ecological perspective, role theory, and methods of decision making.
10. Assess, plan, contract, intervene and evaluate the establishment of working with groups.
11. Analyze the social planning, community planning, social action, community development, and advocacy activities in human service agencies.
12. Design a grant proposal focusing on human services.
13. Demonstrate an understanding of the goals, policies, and procedures of one human service agency.
14. Demonstrate knowledge of community resources to which referrals can be made.
15. Use appropriate human service practice skills within the context of providing direct services.
16. Use oral and written communication skills effectively in human service situations.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

See page 104 for common course numbering information.

Sport and Exercise Studies, A.S. Degree

Program Design

This program is designed for students interested in transferring to a baccalaureate college or university in preparation for opportunities as physical education teachers, athletic trainers, corporate fitness coordinators, wellness coordinators, recreation majors and coaches. The program may be used by students who choose to complete an associate degree and then obtain employment.

Curriculum

Students may select a full- or part-time plan, attending day or evening. The program includes six core courses that apply specifically to sport and exercise studies, eleven liberal arts and science courses with an emphasis on the sciences, and seven elective courses. Students who complete the program will receive certificates in adult CPR, standard first aid, sport injury module, and coaching from the state of Connecticut.

Sport and Exercise Studies Requirements

Gen Ed	BIO 112: Human Biology	4
Gen Ed	ENG 111: College Reading and Writing	3
CIS 102	Meet the PC	2
HPE	Skills Class	1
HPE 141 [†]	Principles & Practices of Coaching	3
SOC 101	Introduction to Sociology	3

Subtotal: 16

HPE 201	Introduction to Physical Education	3
Gen Ed	ENG 112: Reading/Writing for Academic Research	3
HPE	Skills Class	1
REC 101	Introduction to Recreation & Leisure Studies	3
HPE 202	Adapted Physical Education	3
SOSC 110	Introduction to Wellness	3

Subtotal: 16

BIO 114	Principles of Nutrition	3
HPE 120	Principles of Fitness	3
HPE	Skills Class	1
Gen Ed	PSYC 111: General Psychology	3
Gen Ed	Mode 1	3
Elective	Social Science	3

Subtotal: 16

AH 270	Cooperative Education/Work Experience	3
Gen Ed ^{††}	MATH 110: Quantitative Literacy	3
HPE	Skills Class	1
HPE 140	Introduction to Athletic Training	3
HPE 161	Physical Fitness & Exercise	3
COMM 213/SPCH 213	Effective Speaking	3

Subtotal: 16

Total Credits Required: 64

Learning Outcomes

Upon successful completion of all Sport and Exercise Studies degree program requirements, graduates will

1. Understand the basic concepts of fitness, health and wellness.
2. Prepare an exercise prescription for an individual beginning an exercise program.
3. Understand the basic concepts of nutrition, as they relate to carbohydrates, fats, and proteins, and the functions of each within the human body.
4. Identify the skills necessary to administer basic first aid and emergency care.
5. Identify the skills necessary to prepare athletes, with stretching exercises, and taping techniques, in order to assist in the prevention of athletic injuries.
6. Understand the techniques of coaching and the basic principles involved.
7. Identify the skills necessary to assist individuals in making personal health style changes as they relate to overall health and wellness.
8. Utilize a computer in all aspects of their future career.
9. Prepare clear, concise written reports related to assessing individual needs in fitness, health and wellness.
10. Present oral reports on fitness, health and wellness to community and business groups.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] CPR/First Aid Certification required

^{††} Transfer students will be advised to register for MATH 106 or MATH 111

See page 104 for common course numbering information.

Surgical Technology, A.S. Degree

Program Design

The Surgical Technology associate degree program provides education and training in surgical technology, a healthcare specialty whose practitioners are members of a surgical team, trained to work primarily in the operating room in cooperation with surgeons and nurses. Surgical technologists prepare the OR for use, maintain a sterile environment, hand instruments to the surgeon, maintain records and assist with patient care.

The program begins each September and continues through 21 months, including a required summer session. Surgical Technology (SUR*) classes and clinical rotations are scheduled only during the day. Pre-clinical and general education courses are campus-based. Summer session and clinical courses are scheduled at area hospitals including Connecticut Children's Medical Center, Hartford Hospital, Manchester Memorial Hospital, New Britain General Hospital and Bay State Health System. Graduates are prepared, eligible and encouraged to take an examination administered by the Association of Surgical Technologists to achieve the status of Certified Surgical Technologist.

Special expenses such as parking and uniforms may be required in this program.

Scholastic Preparation and Admission Process[†]

Students seeking admission to the Surgical Technology program should have completed one biology laboratory course at the college level within five years and a basic college algebra course, or be exempted by placement test results. The biology course must be a prerequisite for BIO 152. Medically related experience either through employment or volunteering is strongly recommended. Students will need to demonstrate the skills necessary to become a surgical technologist. Admission to the Surgical Technology program requires a separate application which should be filed during the academic year prior to desired admission. Students are admitted on an on-going basis until the class is filled, so early application is recommended. A packet which contains further information and the application forms is available from the College Admissions Office or by calling 860-512-2728.

Students who do not meet the program entrance requirements should select appropriate courses from the Pre-Allied Health Program, an access program that provides courses and guidance to prepare the student for a career in the health field. (See page 27.)

Accreditation

This program is accredited by the Accreditation Review Committee on Education in Surgical Technology and the Commission on Accreditation of Allied Health Education Programs.

Curriculum[†]

The following course sequence is recommended for students without prior college experience. The SUR* course sequence begins in the Fall and must be followed as described below. Anatomy and Physiology, Microbiology and Chemistry must be successfully completed before the student begins the second year clinical courses (SUR* 222, SUR* 225). Students must pass a practice Certification Examination to complete SUR* 224 and be eligible for graduation.

Surgical Technology Requirements

Gen Ed	BIO 152: Human Anatomy & Physiology I	4
CHEM 110	Elements of Chemistry	4
Gen Ed	ENG 111: College Reading and Writing	3
SUR* 101	OR Procedures I	4
SUR* 105	Medical Terminology	2

Subtotal: 17

BIO 141	Microbiology	4
Gen Ed	BIO 153: Human Anatomy & Physiology II	4
Gen Ed	PSYC 111: General Psychology	3
SUR* 102	OR Procedures II	4

Subtotal: 15

SUR* 106	Seminar in Surgery	2
SUR* 220	Clinical Experience I	2

Subtotal: 4

BIO 210	Human Pathology	3
CIS 102	Get Acquainted with IBM or	1
CIS 106	Windows or	2
CIS 111	Introduction to Computers	3
Gen Ed	ENG 120: Introduction to Literature	3
Gen Ed	Mode 4	3
SUR* 222	Clinical Experience II	4

Subtotal: 14-16

BIO 201	Pharmacology	3
COMM 213/SPCH 213	Effective Speaking	3
Gen Ed	Mode 1	3
Elective	Undesignated	3
SUR* 225	Clinical Experience III	4

Subtotal: 16

Total Credits Required: 66-68

Learning Outcomes

Upon successful completion of all Surgical Technology degree program requirements, graduates will

1. Serve as a member of a surgical team in providing high quality care in the operating room or other surgical environment.
2. Perform highly-specialized skills by integrating basic knowledge of surgical techniques and application of problem-solving procedures.
3. Demonstrate interpersonal skills and communicate effectively with patients and other health-care professionals.
4. Demonstrate ability to protect patients' rights and privacy by displaying good judgment, integrity, and a professional manner.
5. Prepare for and successfully complete the examination for certification as a surgical technologist (CST).

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

[†] AH 090 is recommended as a preparation for this program.

See page 104 for common course numbering information.

Therapeutic Recreation, A.S. Degree

Program Design

The Therapeutic Recreation Associate Degree program is designed to address the need for a degree beyond the Therapeutic Recreation Certificate for students pursuing careers as a therapeutic recreation director or supervisor in therapeutic recreation in long term care facilities. The associate degree in therapeutic recreation will also prepare students to work in a variety of therapeutic recreation settings such as rehabilitation facilities, penal institutions, group homes, facilities for developmentally disabled individuals, and in psychiatric settings. Students can expect to obtain employment upon completion of this degree program or transfer to a baccalaureate college or university in therapeutic recreation. Therapeutic recreation is a specialized allied health field within the recreation profession. Associated with leisure aspects of medical treatment, therapeutic recreation attempts to physically and socially rehabilitate patients who have chronic physical, psychological, and social disabilities. It involves recreation services that give the patient an opportunity to participate in recreational, leisure, and group activities specifically designed to aid in the recovery or adjustment to illness, disability or a specific social problem.

Curriculum

Students may enroll in this program full-time or part-time and attend classes days or evenings.

Therapeutic Recreation Requirements

Elective	Computer Information Systems	1-2
Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	PSYC 111: General Psychology	3
REC 101	Introduction to Recreation & Leisure Services	3
SOSC 110	Introduction to Wellness	3
THRC 115	Introduction to Principles of Therapeutic Recreation	3

Subtotal: 16-17

Elective	Gerontology	3
Gen Ed	MATH 110: Quantitative Literacy or	
Gen Ed	MATH 111: Elementary Statistics with Computer Applications	3-4
PSYC 163	Children with Disabilities and Their Families or	
PSYC 173	Adults with Disabilities	3
SOSC 270	Cooperative Education/Work Experience	3
THRC 116	Processes and Techniques in Therapeutic Recreation	3

Subtotal: 15-16

Gen Ed*	BIO 112: Human Biology	4
Gen Ed	Mode 1	3
Gen Ed	Mode 3	3
Gen Ed	PSYC 124: Developmental Psychology	3
THRC 215	Therapeutic Recreation Programs: Planning and Implementation	3

Subtotal: 16

Gen Ed	COMM 213/SPCH 213: Effective Speaking	3
Elective	Social Science or Gerontology	3
THRC 230	Leisure and Aging	3
THRC 280	Professional Practicum in Therapeutic Recreation	4

Subtotal: 13

Total Credits Required: 60-62

Learning Outcomes

Upon successful completion of all Therapeutic Recreation degree program requirements, graduates will:

1. Meet the state health code requirements to hold the positions as a therapeutic recreation director in the State of Connecticut.
2. Demonstrate the ability to comprehend and apply the necessary skills required of a therapeutic recreation director.
3. Demonstrate the ability to comprehend the needs of individuals with special needs and the positive outcomes of therapeutic recreation intervention.
4. Demonstrate the ability to successfully assess, plan, implement, and evaluate therapeutic recreation programs for individuals with special needs both in a clinical and community setting.
5. Have developed leadership, interpersonal, and communication skills necessary to work in a healthcare or community based setting.
6. Demonstrate professional behavior consistent with the therapeutic recreation code of ethics.
7. Demonstrate skills for work as a therapeutic recreation program supervisor in long-term care facilities.
8. Demonstrate the ability to work in a variety of therapeutic recreation settings such as rehabilitation facilities, penal institutions, group homes for the developmentally disabled individuals, psychiatric settings, and a variety of other settings servicing individuals with special needs in a therapeutic recreation settings.
9. Demonstrate computer skills necessary to the therapeutic recreation profession.
10. Demonstrate accurate problem-solving abilities when working in the therapeutic recreation environment.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

* Students planning to transfer to a baccalaureate program should take BIO 152 and BIO 153.

See page 104 for common course numbering information.

Visual Fine Arts, A.A. Degree

Program Design

For those students seeking a professional career, the Visual Fine Arts program offers a transfer-oriented course of studies that leads to enrollment in an art school or other baccalaureate institution. Careers in commercial art, art education and fine arts are open to graduates with bachelor's degrees.

The Visual Fine Arts program also serves an ever-expanding population of students seeking personal enjoyment in the creative process. Technical expertise and aesthetic theory are offered to those who pursue art as an avocation.

Curriculum

Students may enroll in this program full- or part-time. There are no requirements or prerequisites for students wishing to take art courses part-time or as electives for other programs.

Fine arts faculty members are available for consultation with students who wish to enroll in the program and thereafter for course selection and transfer information.

Visual Fine Arts Requirements

Gen Ed	ENG 111: College Reading and Writing	3
Gen Ed	FA 105: History of 20th Century Art	3
FA 121 ⁺	Drawing <u>or</u>	
FA 127	Figure Drawing	3
FA 125	Two Dimensional Design	3
Elective ^{##}	Social Science	3

Subtotal: 15

Gen Ed	ENG 120: Introduction to Literature	3
FA 101 ^{###}	History of Art I <u>or</u> studio course	3
FA 126	Three Dimensional Design	3
FA 131	Painting	3
FA 151	Sculpture	3
Gen Ed	Mode 5	3

Subtotal: 18

FA 102 ^{###}	History of Art II <u>or</u> studio course	3
FA 141	Printmaking	3
Elective	Studio Course	3
Elective	Liberal Arts and Science	3
Gen Ed ^{##}	Mode 6	3

Subtotal: 15

Elective	Studio Course	3
Elective	Studio Course	3
Gen Ed	Fine Arts	3
Elective	Studio Course	3
Gen Ed	MATH 110: Quantitative Literacy	3

Subtotal: 15

Total Credits Required: 63

Learning Outcomes

Upon successful completion of all Visual Fine Arts degree program requirements, graduates will

1. Execute skills and techniques necessary for studio art and demonstrate dexterity with tools, knowledge of equipment specific to various media, and the safe use of all materials and equipment.
2. Demonstrate an historical, cross-cultural appreciation and awareness of the field of visual art.
3. Demonstrate creative thinking, the ability to solve aesthetic, technical and conceptual problems, and critical awareness.
4. Demonstrate an understanding of the principles and elements of two- and three-dimensional design and their applications to various studio disciplines.
5. Compile a comprehensive portfolio of work that reflects the breadth of their study and prepares them for transfer to baccalaureate institutions.

In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Component.

⁺ At least two semesters of Drawing are strongly recommended.

^{##} Social science electives may not exceed two courses in a subject.

^{###} Either FA 101 or FA 102 is required, but not both.

See page 104 for common course numbering information.

Certificate Programs

Certificates

Accounting, Certificate	80
Business Office Technology	
Medical Insurance Specialist, Certificate	81
Medical Transcription, Certificate	81
Office Information Specialist, Certificate	82
Office Skills Update, Certificate	82
Office Support Specialist, Certificate	83
Receptionist, Certificate	83
Word Processing, Certificate	84
Computer-Aided Design (CAD), Certificate	85
Computer Information Systems, Certificate	85
Computer Maintenance Technology, Certificate	86
Computer Network Technology, Certificate	87
Computer Operating Systems Technology, Certificate	88
Computer Programming Technology, Certificate	89
Criminal Justice	
Forensic Science, Certificate	90
Law Enforcement, Certificate	90
Pre-Service Correction, Certificate	91
Culinary Arts, Certificate	92
Professional Baker, Certificate	93
Professional Cook, Certificate	93

Desktop Publishing, Certificate	94
Drug and Alcohol Rehabilitation Counselor	
Management of Substance Abuse	
Treatment Facilities, Certificate	94
Early Childhood Education	
Child Development Associate, Certificate	95
Gerontology, Certificate	95
Marketing, Certificate	96
Media Technology, Certificate	96
Microcomputer Processing, Certificate	97
Office Microcomputer, Certificate	98
Paralegal, Certificate	99
Personal Financial Planning, Certificate	100
Public Relations, Certificate	101
Real Estate Management, Certificate	101
Social Service, Certificate	102
Taxation, Certificate	102
Therapeutic Recreation, Certificate	103

Accounting, Certificate

Program Design

The Accounting certificate program is designed for students who are interested in specialized accounting and/or those who already have a bachelor's degree and would like to change careers. This program also serves individuals currently employed who are not seeking a degree or career change but would like formal training or professional development.

Curriculum

Students may enroll full- or part-time. Students must achieve at least a C- or better in an accounting course to continue on to the next level. *To take an accounting course numbered 100 or higher, students must be eligible for ENG 111 and MATH 101 or higher.*

Required Courses

ACCT 101	Financial Accounting	4
ACCT 102	Managerial Accounting	4
ACCT 105	Accounting & Business Applications Software	3
ACCT 106	Certified Bookkeeper Course #1 <u>or</u>	
ACCT 201	Intermediate Accounting I	3-4
ACCT 107	Certified Bookkeeper Course #2 <u>or</u>	
ACCT 202	Intermediate Accounting II	3-4
ACCT 108	Payroll Accounting <u>or</u>	
ACCT 213	Cost Accounting <u>or</u>	
ACCT 251 [†]	Nonprofit Accounting	3
ACCT 223	Federal Taxes	3
BUS 101	Business Law I	3
CIS 106	Windows	2

Total Credits Required: 28-30

Learning Outcomes

Upon successful completion of all Accounting certificate program requirements, graduates will

1. Demonstrate mastery of generally accepted accounting principles and their manual and computerized spreadsheet applications to all phases of the accounting cycle.
2. Complete relatively complex accounting problems and be familiar with current financial accounting standards and practices.
3. Prepare complete financial statements for sole proprietorships, partnerships and corporations in compliance with current accounting standards and practices.
4. Prepare the 1040 tax return and supporting schedules under simulated conditions.
5. Explain how budgeting, activity-based costing and strategic cost management foster the effective use of resources and help an organization accomplish its goals.
6. Possess computer competencies for maximum efficiency including the use of accounting, spreadsheet and presentation software. Use the Internet for business purposes, including research, marketing, and stock market analysis.
7. Work with others, including culturally and intellectually diverse people; think critically; and gain an appreciation for life-long learning.
8. Demonstrate a responsible attitude in relationships with employers, peers and toward the working environment.
9. Understand the interrelationships between accounting and all other areas within a business including working with other departments to achieve overall strategic goals.
10. Develop sound ethical and moral professional characteristics.
11. Successfully enter the market place in the field of accounting.

[†] *Students who are interested in sitting for the CPP (Certified Payroll Professional) and CB (Certified Bookkeeper) certification exams should enroll in the Certified Bookkeeping Courses #1 and #2 and Payroll Accounting. Students who are interested in a manufacturing environment should take Cost Accounting. Students who are interested in local, state, federal, hospital, fund-raising, or college or university accounting should take Non-profit Accounting.*

See page 104 for common course numbering information.

Business Office Technology

Program Design

Business Office Technology certificates programs allow students to specialize in areas of interest and obtain entry-level office positions. Course credit may be applied toward an associate degree. Advanced placement in keyboarding is available for students with prior training. Students can modify their programs depending upon experience.

Curriculum

These certificate programs may be taken on a full- or part-time basis. They are designed for high school graduates, persons desiring to reenter the office, and college graduates seeking employment.

Medical Insurance Specialist, Certificate

With the numerous changes in the healthcare industry, the Medical Insurance Specialist certificate program is designed to prepare students to handle and code insurance claims in doctor's offices, hospitals, HMOs and other healthcare facilities. There is a great need for employees with coding knowledge.

Required Courses

BOT 107	Beginning Keyboarding	3
BIO 112	Human Biology with Lab	4
BOT 140	Medical Coding I	3
BOT 241	Medical Terminology	3
		subtotal: 13

BOT 141	Medical Coding II	3
BOT 142	Foundation/Management of Medical Insurance	3
BOT 143	Computer Applications in the Medical Office	3
		Subtotal: 9

Total Credits Required: 22

Learning Outcomes

Upon successful completion of all Medical Insurance Specialist certificate program requirements, graduates will

1. Read, understand and prepare standard types of business communications.
2. Demonstrate appropriate interpersonal, human relations skills.
3. Demonstrate proficiency in the use of ICD-9 and CPT coding in entering and/or processing medical insurance claims.
4. Possess appropriate skills in the following software: operating system, and computer applications in the medical office.
6. Understand the importance of confidentiality in dealing with medical insurance issues.

See page 104 for common course numbering information.

Medical Transcription, Certificate

A medical transcriptionist translates from oral to written form highly technical information summarizing medical histories, diagnoses and treatments for patients and can find employment in a variety of health care settings: doctors' offices, health maintenance organizations, medical transcription services, clinics, insurance companies, and various other medical related agencies and organizations.

Required Courses

BIO 210	Human Pathology	3
BOT 124	Microsoft Word for Windows	3
BOT 210	Medical Machine Transcription I	3
BOT 241	Medical Terminology	3

Subtotal: 12

BIO 201	Pharmacology	3
BOT 107	Beginning Keyboarding	3
BOT 103	Office Writing Procedures or	
BOT 203/ENG 203	Advanced Editing and Proofreading	3
BOT 211	Medical Machine Transcription II	3

Subtotal: 12

BOT 270	Cooperative Education/Work Experience or	
BOT 108	Advanced Keyboarding	3

Total Credits Required: 27

Learning Outcomes

Upon successful completion of all Medical Transcription certificate program requirements, graduates will

1. Read, understand and prepare standard types of business communications.
2. Demonstrate appropriate interpersonal, human relations skills.
3. Use appropriate business office procedures.
4. Use correct medical terminology in transcribing various documents.
5. Possess appropriate skills in the following software: operating system, word processing.
6. Demonstrate speed and accuracy in keyboarding skills.
7. Understand the importance of confidentiality in dealing with medical issues.

See page 104 for common course numbering information.

Business Office Technology

continued

Office Information Specialist, Certificate

The management and retention of electronic records is an important office function. Graduates of this program work at the management of records including databases and e-mail in business organizations, professional offices and government agencies.

Required Courses

BOT 103	Office Writing Procedures	3
BOT 107	Beginning Keyboarding	3

Subtotal: 6

BOT 108	Advanced Keyboarding	3
BOT 115	Records Management	3
BOT 124	Microsoft Word for Windows	3
BOT 130	Microsoft Office Suite Applications	3
BOT 222	Administrative Office Procedures	3
BOT 261	Document Creation and Management	3
BOT 262	The Integrated Office	3

Subtotal: 21

Total Credits Required: 27

Learning Outcomes

Upon successful completion of all Records Management certificate program requirements, graduates will

1. Read, understand and prepare standard types of business communications.
2. Demonstrate appropriate interpersonal, human relations skills.
3. Use appropriate business office procedures.
4. Demonstrate a high level of skill in electronic records management.
5. Possess appropriate skills in the following software: operating system, word processing.

See page 104 for common course numbering information.

Office Skills Update, Certificate

This certificate is designed for individuals who wish to enhance and upgrade previously acquired office skills.

Required Courses

CIS 106	Windows	2
BOT 108	Advanced Keyboarding	3
BOT 124	Microsoft Word for Windows	3
BOT 130	Microsoft Office Suite Applications	3
BOT 222	Administrative Office Procedures	3
Elective	Select two of the following: BOT 103 Office Writing Procedures BOT 109 Machine Transcription BOT 224 Office Accounting BOT 261 Document Creation and Management BOT 262 The Integrated Office	6

Total Credits Required: 20

Learning Outcomes

Upon successful completion of all Office Skills Update certificate program requirements, graduates will

1. Read, understand and prepare standard types of business communications.
2. Demonstrate appropriate interpersonal, human relations skills.
3. Use appropriate business office procedures.
4. Demonstrate a high level of skill in the use of word processing software in the production of business documents.
5. Possess appropriate skills in the following software: operating system, word processing, spreadsheet, database, and presentation graphics.
6. Demonstrate speed and accuracy in keyboarding skills.
7. Demonstrate competency in machine transcription.

See page 104 for common course numbering information.

Business Office Technology

continued

Office Support Specialist, Certificate

This certificate program is recommended for students interested in a career assisting the office administrator. Courses in both general and specific applications offer students opportunities for positions in general office support. This program is designed for the entry-level employee.

Required Courses

BOT 224	Office Accounting	3
BOT 103	Office Writing Procedures	3
BOT 107	Beginning Keyboarding	3
BOT 261	Document Creation and Management	3
CIS 106	Windows	2

Subtotal: 14

BOT 108	Advanced Keyboarding	3
BOT 124	Microsoft Word for Windows	3
BOT 130	Microsoft Office Suite Applications	3
BOT 222	Administrative Office Procedures	3
BOT 262	The Integrated Office	3

Subtotal: 15

Total Credits Required: 29

Learning Outcomes

Upon successful completion of all Clerk/Typist certificate program requirements, graduates will

1. Read, understand and prepare standard types of business communications.
2. Demonstrate appropriate interpersonal, human relations skills.
3. Use appropriate business office procedures.
4. Understand and perform accounting tasks.
5. Possess appropriate skills in the following software: operating system, word processing, electronic spreadsheet, database management, integrating office applications, and presentation graphics.
6. Demonstrate speed and accuracy in keyboarding skills.

See page 104 for common course numbering information.

Receptionist, Certificate

Receptionists enjoy contact with the public in many settings. Students who complete this program find employment opportunities in professional offices, business organizations, and government agencies.

Required Courses

BOT 103	Office Writing Procedures	3
BOT 107	Beginning Keyboarding	3
BOT 224	Office Accounting	3
COMM 213/SPCH 213	Effective Speaking	3

Subtotal: 12

BOT 108	Advanced Keyboarding	3
BOT 124	Microsoft Word for Windows	3
BOT 130	Microsoft Office Suite Applications	3
BOT 222	Administrative Office Procedures	3

Subtotal: 12

Total Credits Required: 24

Learning Outcomes

Upon successful completion of all Receptionist certificate program requirements, graduates will

1. Demonstrate speed and accuracy in keyboarding skills.
2. Greet office visitors in a professional manner.
3. Demonstrate professional telephone techniques.
4. Use word processing software effectively in the preparation of documents.

See page 104 for common course numbering information.

Business Office Technology

continued

Word Processing, Certificate

The accurate entry and retrieval of data is essential in today's business environment. Graduates of this program are trained for positions as data entry operators or as word processors. Many kinds of business organizations recruit employees with this training.

Required Courses

BOT 103	Office Writing Procedures	3
BOT 107	Beginning Keyboarding	3
BOT 222	Administrative Office Procedures	3
CIS 106	Windows	2

Subtotal: 11

BOT 108	Advanced Keyboarding	3
BOT 109	Machine Transcription	3
BOT 124	Microsoft Word for Windows	3
BOT 130	Microsoft Office Suite Applications	3

Subtotal: 12

Total Credits Required: 23

Learning Outcomes

Upon successful completion of all Word Processing certificate program requirements, graduates will

1. Understand the flow of information in an office environment and the part played by a word processing employee in using and maintaining that information flow.
2. Use a computer effectively in an office environment.
3. Demonstrate a high level of skill in the use of word processing software to produce business documents.
4. Integrate the use of word processing software and electronic spreadsheet software.
5. Demonstrate skill in presentation software and database software.
6. Demonstrate speed and accuracy in keyboarding skills.
7. Utilize appropriate business office procedures.
8. Demonstrate proficiency in machine transcription.
9. Possess appropriate skills in the following software: spreadsheet, database, presentation graphics.

See page 104 for common course numbering information.

Computer-Aided Design (CAD), Certificate

Program Design

The Computer-Aided Design (CAD) Certificate program will provide students with career-based training in mechanical design utilizing computer-aided drafting/design technology. To provide the necessary technical education base, the program also includes education and training in applied technical mathematics, and engineering drawing and geometric dimensioning and tolerancing skills. Basic training in computer technology is included to prepare students for the 2-dimensional, 3-dimensional and solid-modeling computer-aided design technology in the program. CAD technology in the core of the certificate program is AutoCAD integrated with Pro/ENGINEER solid-modeling and rendering technology, both being predominant technology leaders in CAD/solid-modeling.

All technical manufacturing and engineering design in today's high-technology business and industry utilizes computer-based, computer-aided design technologies which integrate the design, engineering and manufacturing design analysis, and manufacturing of complex products and product parts, sub-assemblies, and assemblies into a single, technically coherent process.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. Students who complete the Computer-Aided Design (CAD) Certificate program and decide to pursue an associates of science degree may apply all of their credits (25 credits) towards the Industrial Technology A.S. Degree program or the Connecticut College of Technology Technological Studies A.S. Degree Pathways program, both of which are articulated technology programs within the Central Connecticut State University's School of Engineering and Industrial Technology. Students should consult with an engineering/technology faculty advisor to plan their program and schedule of classes, and to discuss required course prerequisites.

Required Courses

MATH 115	Technical Mathematics I	3
MATH 116	Technical Mathematics II	3
CIS 111	Introduction to Computers	3
ENGR 101	Engineering Drawing Interpretation	3
ENGR 102	Geometric Dimensioning and Tolerancing	3
CAD 101	Computer-Aided Design (CAD) I (AutoCAD)	3
CAD 102	Computer-Aided Design (CAD) II (AutoCAD)	3
CAD 105	Parametric – Pro/ENGINEER	3

Total Credits Required: 24

Learning Outcomes

1. Interpret complex engineering drawings including geometric dimensioning and tolerancing.
2. Perform competently in solving technical manufacturing and engineering mathematics problems.
3. Exhibit competency in two-dimensional, three-dimensional and solid-modeling skills as applied to complex computer-aided design technology.
4. Demonstrate an understanding of the role and function of computers and effectively use the computer to solve complex technical problems.

See page 104 for common course numbering information.

Computer Information Systems, Certificate

Program Design

The Computer Information Systems certificate program is designed for students with a bachelor's degree who are looking for a career change. This program is also of value to persons employed in the area of computer information systems who want formal training for job advancement.

Curriculum

The Computer Information Systems certificate program may be completed by enrolling full- or part-time. During designated periods, computer labs are open to students for practice and homework projects.

Required Courses

CIS 106*	Windows	2
CST 110	Introduction to Computer Technology	3
CS 125	Programming Logic and Design with C++	3
CS 201	Visual Basic I	3
CS 202	Visual Basic II	3
CS 213	Computer Programming: COBOL I	4
CS 214	Computer Programming: COBOL II	4
CS 230	Database Concepts & Applications with Oracle	3
CIS 118, 159, 166, CST 114, 115, 130, CST 271, 291, CS 223, 224, 225, 259	Computer Information Systems Elective — Choose any 4 credit combination from the following courses.	4

Total Credits Required: 29

Learning Outcomes

Upon successful completion of all Computer Information Systems certificate program requirements, graduates will

1. Demonstrate an understanding of a computer's operating system with regard to file management, system maintenance, system tools, and the customization of the computing environment.
2. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
3. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
4. Identify and apply the major concepts and language requirements to design, code, execute, and debug programs in the required programming languages.
5. Differentiate and apply the basic technologies used in Local and Wide Area Networks.
6. Demonstrate an understanding of proper database design. Apply System Development Life Cycle concepts to plan, design, develop, and code a database.

* Students with no keyboarding experience should take BOT 100A Keyboarding concurrently.

See page 104 for common course numbering information.

Computer Maintenance Technology, Certificate

Program Design

The Computer Maintenance Technology Certificate program is for students seeking specific skills in the installation, configuration, and maintenance of computers and basic to complex computer networks. Students will acquire background and skills to enable them to understand and work with digital machines from microprocessors to microcomputers to mainframe systems configured in Local Area or Wide Area Networks. Students will learn to: install, configure, maintain and upgrade stand-alone computers or computers within networks; troubleshoot basic hardware and software problems on computers and within computer networks; understand the fundamentals of computer operating systems; describe and understand the basic technologies used in Local and Wide Area Networks, including logical and physical technologies as well as hardware and software associated with computer networks; and demonstrate sufficient knowledge in computer and computer networking technology to secure career placement in the field. Classroom discussion is supplemented with "hands-on" computer network laboratory experience and projects.

The experience and training in the Computer Maintenance Technology Certificate program will begin to prepare students for the core and elective computer industry network certification examinations such as the national CompTIA Computer Technicians A+ Certification Examination.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. Students who complete the Computer Maintenance Technology Certificate program and decide to pursue an associates of science degree may apply all of their credits (27 credits) towards the Computer Network Technology A.S. Degree program (67 credits). Students should consult with a computer science/technology faculty advisor to plan their program and schedule of classes, and to discuss required course prerequisites.

Required Courses

CST 110	Introduction to Computer Technology	3
CST 130	Fundamentals of Computer Operating Systems	4
CST 271	Network Theory and Application	4
CST 291	Computer Hardware Maintenance	4
CST 292	System Software Maintenance	4
CST 231	Computer Operating Systems- Windows Workstation	4
CST 293	Server Hardware Maintenance	4

Total Credits Required: 27

Learning Outcomes

1. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
2. Describe basic computer organization and the relationship between hardware components and the operating system.
3. Describe the essential operating system components and the operating services.
4. Differentiate and apply the basic technologies used in Local and Wide Area Networks.
5. Demonstrate skills in installation, configuration, maintenance, troubleshooting, and upgrade of computer operating systems at both the workstation and server levels.
6. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician's point of view.
7. Demonstrate proficiency in installation, maintenance, upgrade and troubleshooting of computer operating systems from the PC technician's point of view.

See page 104 for common course numbering information.

Computer Network Technology, Certificate

Program Design

The Computer Network Technology Certificate program is for students seeking a broad and in-depth knowledge of the theory, design, installation, configuration, maintenance and administration of basic to complex computer networks. Students will acquire background and skills to enable them to understand and work with digital machines from microprocessors to microcomputers to mainframe systems configured in Local Area Network or Wide Area Network configurations. Students will learn to: describe and understand the various aspects of computer network operating systems and their design and implementation; describe and understand the theory involved in computer networks; describe and understand the basic technologies used in Local and Wide Area Networks, including logical and physical technologies as well as hardware and software associated with computer networks; demonstrate a working knowledge of computer networks by describing design and technologies used in computer networks including: transmission media, topologies, protocols, interface performance analysis, bridges, gateways, data integrity, and network security; and demonstrate sufficient knowledge in computer network theory, technology, and administration to secure career placement in the field. Classroom discussion is supplemented with "hands-on" computer network laboratory experience and projects.

The experience and training in the Computer Network Technology Certificate program will begin to prepare students for the core and elective computer industry network certification examinations such as the Microsoft MCP (Microsoft Certified Professional) and MCSE (Microsoft Certified Systems Engineer) certifications.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. Students who complete the Computer Network Technology Certificate program and decide to pursue an associates of science degree may apply all of their credits (28 credits) towards the Computer Network Technology A.S. Degree program (67 credits). Students should consult with a computer science/technology faculty advisor to plan their program and schedule of classes, and to discuss required course prerequisites.

Required Courses

CST 110	Introduction to Computer Technology	3
CST 130	Fundamentals of Computer Operating Systems	4
CST 271	Network Theory and Application	4
CST 272	Network Infrastructure and Implementation	3
CST 281	Network Security Fundamentals	3
CST 231	Computer Operating Systems- Windows Workstation	4
CST 232	Computer Operating Systems- Windows Server	4
CST 233	Computer Network Management	3

Total Credits Required: 28

Learning Outcomes

1. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
2. Describe basic computer organization and the relationship between hardware components and the operating system.
3. Describe the essential operating system components and the operating services.
4. Differentiate and apply the basic technologies used in Local and Wide Area Networks.
5. Demonstrate and implement advanced networking infrastructure concepts.
6. Demonstrate the use of appropriate tools to administer and troubleshoot server and client computers on a network.
7. Demonstrate skills in installation, configuration, maintenance, troubleshooting, and upgrade of computer operating systems at both the workstation and server levels.
8. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician's point of view.

See page 104 for common course numbering information.

Computer Operating Systems Technology, Certificate

Program Design

The Computer Operating Systems Technology Certificate program is designed to provide students with computer technology skills and training in the installation, configuration, maintenance, troubleshooting and upgrading of computer operating systems at both the server and client workstation level. The training will prepare students for careers as computer and network operating systems technicians and system maintenance technicians. The program courses include: fundamentals of computer technology and generic computer operating system theory; introductory computer programming theory; computer equipment upgrade and repair; database concepts and applications; computer network fundamentals; and specific training in Microsoft Windows Workstation and Server operating system technology. Classroom discussion is supplemented with "hands-on" computer network laboratory experience and projects.

The experience and training in the Computer Network Technology Certificate program will begin to prepare students for the core and elective computer industry network certification examinations such as the Microsoft MCP (Microsoft Certified Professional) and MCSE (Microsoft Certified Systems Engineer) certifications.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. Students who complete the Computer Operating Systems Technology Certificate program and decide to pursue an associates of science degree may apply all of their credits (29 credits) towards the Computer Network Technology A.S. Degree program (67 credits). Students should consult with a computer science/technology faculty advisor to plan their program and schedule of classes, and to discuss required course prerequisites.

Required Courses

CST 110	Introduction to Computer Technology	3
CS 125	Programming Logic and Design with C++	3
CS 230	Database Concepts & Applications with Oracle	3
CST 130	Fundamentals of Computer Operating Systems	4
CST 271	Network Theory and Application	4
CST 291	Computer Hardware Maintenance	4
CST 231	Computer Operating Systems- Windows Workstation	4
CST 232	Computer Operating Systems- Windows Server	4

Total Credits Required: 29

Learning Outcomes

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Describe the essential operating system components and the operating services.
5. Demonstrate an understanding of proper database design. Apply System Development Life Cycle concepts to plan, design, develop, and code a database.
6. Differentiate and apply the basic technologies used in Local and Wide Area Networks.
7. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician's point of view.
8. Demonstrate skills in installation, configuration, maintenance, troubleshooting, and upgrade of computer operating systems at both the workstation and server levels.

See page 104 for common course numbering information.

Computer Programming Technology, Certificate

Program Design

The Computer Programming Technology Certificate program will provide students with broad and in-depth knowledge of the theory, design and applications of digital computers and information processing technologies with a particular emphasis on programming skills. Students will acquire the background and skills to enable them to work with digital machines from microprocessors to microcomputers to mainframe systems configured in Local Area Network of Wide Area Network configurations. Students will learn: the concepts of efficient programming design, both traditional and object-oriented; to understand the role and function of computers and learn to effectively use the computer to solve complex problems; to describe and understand the various aspects of computer operating systems; to design, code, run, and debug computer programs in the predominant computer industry and Internet programming languages: C++, Visual Basic, Java; to understand good computer database design by designing, developing forms and reports, and writing the code to prepare working databases; and to apply critical thinking and analytical skills to the computer programming solution of complex problems. Classroom discussion is supplemented with "hands-on" computer laboratory programming experience and problem solving programming projects.

Curriculum

Students may enroll in this program full or part-time. Courses are offered during daytime or evening hours. Students who complete the Computer Programming Technology Certificate program and decide to pursue an associates of science degree may apply all of their credits (24 credits) towards the Computer Programming Technology A.S. Degree program (66 credits). Students should consult with a computer science/technology faculty advisor to plan their program and schedule of classes, and to discuss required course prerequisites.

Required Courses

CST 110	Introduction to Computer Technology	3
CS 125	Programming Logic and Design with C++	3
CS 201	Visual Basic I	3
CS 202	Visual Basic II	3
CS 223	Programming in C++	3
CS 228	Advanced Programming in C++	3
CS 224	Programming in Java	3
CS 230	Database Concepts & Applications with Oracle	3

Total Credits Required: 24

Learning Outcomes

1. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
2. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
3. Describe basic computer organization and the relationship between hardware components and the operating system.
4. Describe the essential operating system components and the operating services.
5. Identify and apply the major concepts and language requirements to design, code, execute, and debug programs in the required programming languages.
6. Demonstrate an understanding of proper database design. Apply System Development Life Cycle concepts to plan, design, develop, and code a database.

See page 104 for common course numbering information.

Criminal Justice

Forensic Science, Certificate

Program Design

The Forensic Science certificate program is designed for students who want to obtain knowledge in the area of forensics for their work in criminal investigation. The certificate is recommended for students who are already working in the field of criminal investigation, those who would like to specialize in this area or those who have a particular interest in the field of study.

Required Courses

CJ 230	Introduction to Forensic Science	3
CJ 231	Advanced Forensic Science	3
CJ 221	Criminal Investigation	3
CJ 222	Evidence and Court Procedure	3
PSYC 232	Social Psychology of Criminal Behavior <u>or</u>	
PSYC 299	Forensic Psychology	3
POL* 111	American Government <u>or</u>	
POL* 112	State and Local Government	3
CHEM 110	Elements of Chemistry <u>or</u>	
BIO 112	Human Biology	4
Elective	Criminal Justice	3
CJ 123	Forensic Photography	3

Total Credits Required: 28

Learning Outcomes

Upon completion of the certificate, students will be able to:

1. Define forensic science and describe it's importance in criminal investigation.
2. Define physical evidence and how it is used to provide investigative leads.
3. Describe the various approaches to different types of crime scenes.
4. Define specialized fields of forensic science
5. Collect evidence at crime scenes including photographic evidence.
6. Examine forensic evidence including fingerprints and firearms evidence.
7. Reconstruct shooting related cases and measure bullet trajectories.
8. Interpret bloodstain patterns at crime scenes.
9. Define concepts associated with crime scenes and crime scene reconstruction.

See page 104 for common course numbering information.

Law Enforcement, Certificate

Program Design

This certificate offers those employed in law enforcement a way to improve career opportunities through academic study.

Required Courses

CJ 111	Introduction to Criminal Justice	3
CJ 211	Criminal Law	3
CJ 221	Criminal Investigation	3
POL* 111	American Government	3
SOC 101	Introduction to Sociology	3

Subtotal: 15

CJ 112	Police Patrol Procedures	3
CJ 122	Police Administration	3
CJ 222	Evidence and Court Procedure	3
POL* 212	Constitutional Law and Civil Rights	3
SOC 221	Criminology	3

Subtotal: 15

Total Credits Required: 30

Learning Outcomes

With the addition of experience in the field of law enforcement and upon successful completion of all Law Enforcement certificate program requirements, graduates will

1. Demonstrate knowledge of the language, terms, and concepts of criminal justice and police administration.
2. Define and describe each component of the present criminal justice system.
3. Identify, describe, and clarify problems existing in the present criminal justice system and propose ways of continued improvement of the system.
4. Identify the nature, origins, structure, purpose, and constitutional limits of criminal law.
5. Identify the doctrines of complicity and inchoate crimes.
6. Identify the defenses of justification and excuse to an individual's criminal liability.
7. Describe the roots of early common law and how it relates to statutory law.
8. Demonstrate an understanding of the fundamentals of criminal investigations.
9. Demonstrate an understanding of new and innovative investigation methods and techniques.
10. Demonstrate an understanding of laws of evidence as it relates to the criminal justice field.
11. Identify courtroom procedures.

See page 104 for common course numbering information.

Criminal Justice, *continued*

Pre-Service Correction, Certificate

Program Design

The program helps prepare students for entry into the State of Connecticut's Department of Correction as a Correctional Trainee. The curriculum requires 15 semester hours of college study, leading to a certificate. The Department of Administrative Services affords program graduates a waiver for the Correction Department's written entrance examination. Upon successful completion, the Department of Correction will require candidates to pass the remaining series of screening tests in order to be employed.

Required Courses

COMM 213/SPCH 213	Effective Speaking	3
CJ 102	Criminal Justice Field Experience	3
CJ 114	Introduction to Corrections	3
ENG 114	Technical Writing	3
SOC 202	Contemporary Social Problems	3

Total Credits Required: 15

Learning Outcomes

The student who successfully completes this certificate will

1. Explain the history and development of the system of corrections in American.
2. Explain the structure of the Connecticut Department of Correction.
3. Explain contemporary correctional issues, including prisoner's rights, overcrowding, prison building, early release programs, the costs of corrections, privatizing, and the changing emphasis in correctional theory.
4. Provide examples of ways in which social forces affect our everyday lives.
5. Explain how deviance is interpreted as a product of society.
6. Evaluate the various explanations of deviance.
7. Present oral reports before a group.
8. Demonstrate work skills relevant to the Connecticut Department of Correction.
9. Process forms and other paperwork that would be handled by a Correction Officer.
10. Integrate the theoretical and practical applications of the Pre-Service Correction Certificate.

See page 104 for common course numbering information.

Culinary Arts, Certificate

Program Design

The Culinary Arts certificate program is designed for both full- and part-time students pursuing a career in commercial food preparation. Academic credits from this program may be transferred to MCC's associate degree programs in Foodservice Management or Hotel-Tourism Management. Our students have also earned advanced placement status in the Culinary Arts Program at Johnson & Wales University.

Classroom, laboratory and volume food experience are combined in one of the largest and most comprehensively equipped foodservice laboratory facilities in Connecticut, including two commercial production kitchens and three dining rooms. The students participate in a 300-hour externship in a cooperative education environment that combines classroom theory with practical on-the-job training.

Students are required to purchase their own official kitchen and tableservice uniforms.

Graduates from this program may apply to the American Culinary Federation to become a "certified cook," a nationally recognized certification.

Note: Students seeking certification from the American Culinary Federation are required to take HOSP 120: Decorative Work and Display Pieces (1 credit).

Required Courses

HOSP 101 [‡]	Basic Foods Preparation	3
HOSP 102	Regional American Cuisine	4
HOSP 112 ^{##}	Sanitation and Safety	3
HOSP 115	Basic Baking and Pastry Arts	3

Subtotal: 13

HOSP 270	Cooperative Education/Work Experience	3
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Subtotal: 3

BIO 104 ^{##}	Applied Nutrition	3
HOSP 210	Buffet Catering and Garde Manger	4
HOSP 215	Advanced Baking and Pastry Arts	3
HOSP 217	International Foods	4

Subtotal: 14

Total Credits Required: 30

Learning Outcomes

Upon successful completion of all Culinary Arts certificate program requirements, graduates will

1. Analyze theory and techniques of food preparation and presentation.
2. Analyze theory and techniques of baking and pastry arts.
3. Prepare menus incorporating costs, acquisition, and inventory controls.
4. Summarize basic principles and concepts of the hospitality industry.
5. Create and cater events.
6. Prepare basic foods in quantity, including various regional foods.
7. Prepare ethnic cuisine in quantity.
8. Evaluate the establishment and maintenance of a safe and sanitary foodservice operation including Hazard Analysis Critical Control Point and State of Connecticut law.
9. Set-up and operate the "front of the house."
10. Summarize managerial techniques and human resource management practice.
11. Demonstrate appropriate problem-solving techniques in addressing management problems.

[‡] Students taking HOSP 101 and 115 must be eligible for MATH 101 or be taking MATH 098 concurrently.

^{##} Students taking HOSP 112 and BIO 104 must be eligible for ENG 111.

See page 104 for common course numbering information.

Culinary Arts, *continued*

Professional Baker, Certificate

Program Design

The Professional Baker certificate program is designed to further education and training for those already in the field, as well as accommodate people entering careers in the Culinary Arts. The certificate programs outlined below may be completed in one semester. It may be possible to use your present position as a CO-OP site. Course work in both 15-week Professional Baker and Professional Cook certificate programs transfer to the MCC Culinary Arts Certificate Program, enabling the student to become an American Culinary Federation Certified Cook.

Required Courses

HOSP 100	Food Safety Certification	1
HOSP 105	Cake Decorating	2
HOSP 115	Basic Baking and Pastry Arts	3
HOSP 215	Advanced Baking and Pastry Arts	3
HOSP 270	Cooperative Education/Work Experience	3

Total Credits Required: 12

Learning Outcomes

Upon successful completion of all Professional Baker certificate program requirements, graduates will

1. Analyze theory and techniques of baking and pastry arts.
2. Evaluate the establishment and maintenance of a safe and sanitary foodservice operation including HACCP and State of Connecticut law.
3. Decorate layer cakes with molded and sculpted decorations.
4. Transfer acquired knowledge to the world of work.

See page 104 for common course numbering information.

Professional Cook, Certificate

Program Design

The Professional Cook certificate program is designed to further education and training for those already in the field, as well as accommodate people entering careers in the Culinary Arts. The certificate program outlined below may be completed in one semester. It may be possible to use your present position as a CO-OP site. Course work in both 15-week Professional Baker and Professional Cook certificate programs transfer to the MCC Culinary Arts Certificate program, enabling the student to become an American Culinary Federation Certified Cook.

Required Courses

HOSP 100	Food Safety Certification	1
HOSP 101	Basic Foods Preparation	3
HOSP 102	Regional American Cuisine	4
HOSP 115	Basic Baking and Pastry Arts	3
HOSP 270	Cooperative Education/Work Experience	3

Total Credits Required: 14

Learning Outcomes

Upon successful completion of all Professional Cook certificate program requirements, graduates will

1. Analyze theory and techniques of food preparation and presentation.
2. Analyze theory and techniques of baking and pastry arts.
3. Prepare basic foods in quantity, including various regional foods.
4. Evaluate the establishment and maintenance of a safe and sanitary foodservice operation including HACCP and State of Connecticut law.
5. Transfer acquired knowledge to the world of work.

See page 104 for common course numbering information.

Desktop Publishing, Certificate

Program Design

The Desktop Publishing certificate program develops students' competency in computer-assisted design and production of brochures, fliers, newsletters and related materials. Students will attain the skills needed to perform desktop publishing duties in a variety of business and public relations settings. This program is ideal for those who work in public relations and advertising communications and wish to achieve computer fluency.

Desktop publishing students will take six credit hours on the Apple Macintosh, using software programs such as Adobe PageMaker, Adobe Illustrator and QuarkXPress to complete sophisticated projects. Students who wish to enter the program should have an interest in communications and/or graphics. Keyboard competency is necessary.

Curriculum

The certificate program can be completed in two or more semesters by enrolling full- or part-time.

Required Courses

COMM 281	Basic Newswriting	3
COMM 290	Introduction to Desktop Publishing <u>or</u>	
FA 210	Computer Graphics I	3
FA 211	Advanced Computer Graphics	3
ENG 111	College Reading and Writing	3
ENG 114	Technical Writing	3
FA 205	Graphic Design I	3

Total Credits Required: 18

Learning Outcomes

Upon successful completion of all Desktop Publishing certificate program requirements, graduates will

1. Develop, write and design brochures, newsletters and related print material.
2. Demonstrate the writing conventions associated with technical reports and other institutional publications.
3. Write articles in an acceptable journalistic style.
4. Understand the principles of graphic design and apply design techniques to a variety of documents.
5. Effectively use the Macintosh computer and design-related software.

See page 104 for common course numbering information.

Drug and Alcohol Rehabilitation Counselor

Management of Substance Abuse Treatment Facilities, Certificate

Program Design

The Management of Substance Abuse Treatment Facilities certificate program is a 15 semester hour program that provides further education and training to professionals already working in the field of substance abuse and treatment.

Required Courses

CIS	3 credit hours of microcomputers	3
DARC 101	Issues in Alcohol/Drug Abuse	3
DARC 158	Biology of Alcohol/Drug Abuse	3
DARC 230	Management of Human Service Facilities	3
PSYC 240	Organizational Behavior	3

Total Credits Required: 15

Learning Outcomes

Upon successful completion of all Management of Substance Abuse Treatment Facilities certificate program requirements, graduates will

1. Define the causes and characteristics of dependency and addiction relevant to various populations and cultures.
2. Define and describe the important terminology and concepts relating to the biology of drug and alcohol abuse.
3. Demonstrate an understanding of managed care and the relationship to substance abuse treatment.
4. List funding sources for the successful operation of substance abuse treatment facilities.
5. Demonstrate an understanding of the psychological factors which affect the individual in the work setting.
6. Develop staff training approaches to meet the unique needs of substance abuse counselors.
7. Apply for state certification as a substance abuse supervisor.

See page 104 for common course numbering information.

Early Childhood Education

Child Development Associate, Certificate

Program Design

The Child Development Associate (CDA) credential training program is a two semester, 12 credit program for child care teachers who want to enhance their professional skills and learn more about the development of young children. The program emphasizes practical information that can be used in working with young children. Students learn how to observe children and plan developmentally appropriate activities to design safe, healthy learning environments. They learn to work effectively with families, and to support and encourage children's social, emotional, physical and cognitive development.

Curriculum

Students must meet the following eligibility requirements to take the CDA certificate program: They must be 18 years of age; hold a high school diploma or GED; be currently employed or regularly volunteer in a state licensed child care program; meet state immunization requirements; and successfully complete an interview with the CDA program coordinator.

Required Courses		
ED 211	Early Childhood Curriculum	3
ED 212	Creative Activities for the Early Childhood Program	3
ED 200	Field Experience I	3
ED 200c	Field Experience II	3
		Total Credits Required: 12

Learning Outcomes

Upon successful completion of all Child Development certificate program requirements, graduates will

1. Identify, document, and assess elements that determine quality in early childhood programs.
2. Design a learning environment and use teaching strategies that are based upon child development theory.
3. Plan, implement, and evaluate a developmentally appropriate curriculum that fosters children's social, emotional, physical, and cognitive development.
4. Examine program philosophy and goals, classroom design, teacher/child interaction, planning and implementation of curriculum, observation and assessment of the young child, and family involvement in a variety of early childhood settings.
5. Demonstrate good early childhood practice in an early childhood setting.

See page 104 for common course numbering information.

Gerontology, Certificate

Program Design

The Gerontology Certificate Program is designed for persons who seek short-term academic and in-service professional development, and for those with experience working with senior citizens or who have an academic degree in a related area. Students working toward a certificate in gerontology should consult with an advisor or counselor before planning the total program.

Curriculum

Students may enroll in the certificate program full- or part-time.

Required Courses		
HS 101	Introduction to Human Services	3
HS 152	Work with Individuals and Families	3
PSYC 117	Death, Grief, and Loss	3
GERN 161	Aging in America	3
SOSC 270	Cooperative Education/Field Experience	3
PSYC 111	General Psychology	3
THRC 230	Leisure and Aging	3
SOSC 110	Introduction to Wellness	3
SOC 101	Introduction to Sociology	3
PSYC 125	Psychology of Aging and Mental Health	3
		Total Credits Required: 30

Learning Outcomes

Upon successful completion of all Gerontology certificate program requirements, graduates will

1. Comprehend the physiological, psychological and socio-economic factors relating to the aging process.
2. Demonstrate the ability to comprehend the needs of an elderly person and identify sources of assistance to meet those needs.
3. Demonstrate the ability to identify the need for advocacy for the elderly and sources of assistance.
4. Identify factors necessary for successful aging.
5. Demonstrate interpersonal and communication skills necessary to work in a healthcare or community-based setting serving an elderly population.

See page 104 for common course numbering information.

Marketing, Certificate

Program Design

The Marketing certificate program is designed for students who are interested in a career change or who already have a degree and are looking for a career specialty.

Curriculum

Students may enroll full- or part- time. Since some courses are not offered in both the fall and spring semesters, see an advisor about your schedule. Note: All business courses numbered 100 or higher require students to be eligible for ENG 111 except BUS 111.

Required Courses

BUS 111	Business Environment	3
BUS 121	Principles/Methods of Marketing I	3
BUS 122	Principles/Methods of Marketing II	3
BUS 221	Sales and Techniques of Selling	3
BUS 231	Basic Advertising Principles	3
COMM 213/SPCH 213	Effective Speaking	3
PSYC 111	General Psychology	3

Total Credits Required: 21

Learning Outcomes

Upon successful completion of all Marketing certificate program requirements, graduates will

1. Understand marketing methods and institutions, including analysis and interrelationship of the marketing mix.
2. Possess computer skills appropriate to the marketing area including word processing, electronic spreadsheet, Internet browser, database management, and presentation software.
3. Use the Internet for business purposes, including research, marketing, and stock market analysis.
4. Understand market theory and its application to product planning, price determination, government regulation, and distribution cost analysis.
5. Demonstrate advertising strategy, tactics and techniques, including media selection, ad preparation, market research methods, and program evaluation.
6. Apply and demonstrate the principles, methods and techniques of selling and retailing.
7. Understand the interrelationships between marketing and all other areas within a business including working with other departments to achieve overall strategic goals.
8. Work with others, including culturally and intellectually diverse people; think critically; and gain an appreciation for life-long learning.
9. Develop sound ethical and moral professional characteristics.
10. Demonstrate a responsible attitude in relationships with employers, peers and toward the working environment.
11. Successfully enter the business world in the field of marketing.

See page 104 for common course numbering information.

Media Technology, Certificate

Program Design

The Media Technology certificate program provides an intensive exposure to a range of current communication technologies. It is intended for students who are technically oriented and wish to work in technical positions in the fields of radio, television, photography, desktop publishing and cable television. It concentrates on teaching skills that are necessary for working behind-the-scenes in media and communications. Classes are highly practical and provide significant hands-on opportunity, allowing the student to apply classroom theory to real-life projects. In developing this certificate program, extensive effort was made to provide skills that are currently in high demand in the Connecticut labor market.

Curriculum

The program can be completed in two semesters of rigorous, full-time study, but will take longer for the student attending part-time.

Required Courses

COMM 150	Issues in Print, Broadcast, Photojournalism	3
COMM 176/FA 176	Video/Filmmaking	3
COMM 290	Introduction to Desktop Publishing	3
COMM 206	Broadcast Announcing <u>or</u>	3
COMM 210	Broadcast/TV Production	4
COMM 211*	Advanced Broadcast/TV Production	4
COMM 270	Cooperative Education/Work Experience	3
COMM 218	Television Writing <u>or</u>	
COMM 285	Television News Reporting	3

Total Credits Required: 22-23

Learning Outcomes

Upon successful completion of all Media Technology certificate program requirements, graduates will

1. Write copy for radio and television.
2. Effectively use the Macintosh computer and design-related software.
3. Understand and apply the basic principles of graphic arts and design techniques.
4. Operate still and video cameras and edit videotape.
5. Conduct interviews for newspaper stories and television programs.
6. Write scripts for radio and television programs.

* Students may enroll in COMM 211 even if they have not taken COMM 210

See page 104 for common course numbering information.

Microcomputer Processing, Certificate

Program Design

The Microcomputer Processing certificate is principally designed for persons who wish to obtain a well rounded background in microcomputer skills to enhance career opportunities or personal productivity.

The student population for this program is likely to include:

- Managers of small offices who must be knowledgeable in all facets of microcomputer operations.
- Computer information systems graduates who wish to specialize in the microcomputer.
- Liberal Arts graduates who wish to develop technical skills in the microcomputer field.
- Students and graduates from business programs who wish to strengthen their résumé with technical microcomputer skills.
- Administrative staff who would benefit from additional microcomputer technical training.
- Individuals seeking a career change or increased career mobility.
- Individuals seeking to develop their microcomputer skills for personal use.
- Mature employees seeking a career change or increased career mobility.
- Adult learners returning to the labor force who are interested in developing expertise in the microcomputer field.

Curriculum

This program can be completed on a part-time basis over a two year period. It can be completed in one year through full-time attendance. Some courses may only be offered in the evening. Not all courses are offered each semester so students should plan their schedule carefully. It is recommended that students have previous keyboarding experience.

The following is a suggested curriculum arrangement for those wishing to complete the certificate within one year.

Required Courses

CIS 106*	Windows	2
CST 110	Introduction to Computer Technology	3
CS 114	Exploring the Internet	2
CS 125	Programming Logic and Design with C++	3
CIS 166	Application Software: Excel	3

Subtotal: 13

CIS 118	Presentation Software: PowerPoint	1
CIS 159	Database Management: Access	3
BOT 125	Introductory Microsoft Word for Windows	1
CST 271	Network Theory and Application	4
CST 291	Computer Hardware Maintenance	4
CS 201	Visual Basic I	3

Subtotal: 16

Total Credits Required: 29

Learning Outcomes

Upon successful completion of all Microcomputer Processing certificate program requirements, graduates will

1. Demonstrate an understanding of a computer's operating system with regard to file management, system maintenance, system tools, and the customization of the computing environment.
2. Demonstrate the ability to understand a problem and develop logically structured solutions through the use of flowcharts, pseudocode, and C++ code.
3. Differentiate and understand the role and function of various current and emerging technologies, including, but not limited to, computer hardware, networking, programming, database, and Internet technologies.
4. Demonstrate effective use of computer applications including word processing, spreadsheets, presentation software, and database management software.
5. Demonstrate the ability to use and configure Internet browsers, E-mail, search engines, and advanced Internet tools.
6. Identify and apply the major concepts and language requirements to design, code, execute, and debug programs in the required programming languages.
7. Differentiate and apply the basic technologies used in Local and Wide Area Networks.
8. Demonstrate competency in installing, repairing, servicing, troubleshooting and upgrading computers and peripheral equipment from the PC technician's point of view.

* Students with no keyboarding experience should take BOT 100A Keyboarding concurrently.

See page 104 for common course numbering information.

Office Microcomputer, Certificate

Program Design

The Office Microcomputer certificate is designed for students who wish to upgrade their computer skills in the area of office software. This certificate uses the Microsoft Office software package as the vehicle for this skill development. Students will develop proficiency in the Windows operating system, word processing, spreadsheet use, database creation and reporting, presentation development and using the Internet.

With the rapid expansion of microcomputers in the business world, individuals with microcomputer skills are essential at all levels of office management from the receptionist to the office manager. This certificate will provide an educational opportunity for the student who wants to obtain skill training but does not want to move into the programming level of computer use. All courses required for this certificate are available during the regular credit semester and in the Weekend College.

Required Courses

BOT 124 [‡]	Microsoft Word for Windows	3
CIS 106 ^{††}	Windows	2
CIS 114	Exploring the Internet	2

Subtotal: 7

CIS 118	Presentation Software: PowerPoint	1
CIS 159	Database Management: Access	3
CIS 166	Application Software: Excel	3

Subtotal: 7

Total Credits Required: 14

Learning Outcomes

Upon successful completion of all Office Microcomputer certificate program requirements, graduates will

1. Demonstrate an understanding of a computer's operating system with regard to file management, system maintenance, system tools, and the customization of the computing environment.
2. Demonstrate proficiency in creating and formatting Microsoft Word documents.
3. Show proficiency in developing, enhancing, and demonstrating PowerPoint presentations.
4. Demonstrate proficiency in utilizing Excel features such as workbooks, functions, charts, databases, templates and basic macros.
5. Demonstrate proficiency in the use of a relational desktop database management system including tables, forms and report objects.
6. Demonstrate the ability to use and configure Internet browsers, E-mail, search engines, and advanced Internet tools.

[‡] Students may take BOT 125, BOT 126, and BOT 127 in place of BOT 124.

^{††} Students with no keyboarding experience should take BOT 100A or BOT 107 concurrently.

See page 104 for common course numbering information.

Paralegal, Certificate

Program Design

A paralegal or legal assistant is a person, qualified through education, training or work experience, who is employed or retained by a lawyer, law office, governmental agency or other entity. The paralegal performs specifically delegated, substantive legal work, for which a lawyer is responsible.

Paralegals may be asked to conduct research and prepare memoranda; to draft pleadings, deeds or contracts; to interview clients or witnesses; to prepare answers to interrogatories; or to digest depositions. They may prepare inventories, accounts and tax returns in connection with estates and trusts; perform real estate title searches and UCC searches; calendar and track important deadlines; or organize and maintain client files. Paralegals may not give legal advice or engage in the unauthorized practice of law.

The Paralegal certificate program is designed for students who have or are obtaining an educational (not vocational) associate or baccalaureate degree in a major other than paralegal or legal studies. The certificate program provides them with the opportunity to enroll in a paralegal studies program that meets standards set by the American Bar Association, the National Federation of Paralegal Associations, and the American Association for Paralegal Education. Transcripts showing prior degrees must be sent directly to the Admissions Office

A student who applies for graduation from the Paralegal certificate program must provide proof that he/she has received, or will concurrently receive, an educational associate or baccalaureate degree in a major other than paralegal or legal studies from an accredited institution.

The MCC Paralegal Association is an active student club that offers seminars throughout the year and distributes a newsletter to members.

The Paralegal program has been approved by the American Bar Association since 1984. It is a member of the American Association for Paralegal Education.

Curriculum

The Paralegal program is primarily an evening program of study, offering legal courses during the academic year. Many students work full time while attending classes at night. Students should note that not all courses are offered every semester, and only some courses are offered in the day. Part-time students should see a counselor for suggested course sequencing.

Note: All legal courses, and POL* 120: Introduction to Law, require students to be eligible for ENG 111, or permission of the instructor.

Required Courses

BUS 101	Business Law I	3
POL* 120	Introduction to Law	3
LEGL 110	Legal Ethics and Professional Responsibility	1
LEGL 112	Legal Research	3
LEGL 207	Real Estate Transactions	3
LEGL 211	Business Organizations	3
LEGL 220 [†]	Computer Applications in Law	4
LEGL 221	Litigation	3
LEGL 231	Wills, Trusts and Estate Administration	3
LEGL 120, 205, 212, LEGL 215, 222, LEGL 225/CJ 225, LEGL 226/CJ 226, or LEGL 270	Legal Elective — Choose 1	3

Total Credits Required: 29

Learning Outcomes

Upon successful completion of all Paralegal certificate program requirements, graduates will

1. Understand the proper role of the legal assistant in the delivery of legal services to the public and the ethical rules that govern the conduct of the legal profession.
2. Understand how to analyze a fact situation, identify legal issues, research these issues, and prepare memoranda of law.
3. Prepare legal documents such as deeds, mortgages, wills, trusts, pleadings, probate forms and business documents and agreements for review by the supervising attorney.
4. Perform law office management and administrative tasks through the establishment and implementation of office policy and procedures, and the development of computer competencies for maximum efficiency.
5. Approach new problems and subject matter in an organized and efficient manner, with an understanding of the importance and responsibility placed on the paralegal.

[†] Students without a strong foundation in computer skills should take CIS 111 or BOT 130 prior to enrolling in Legl 220.

See page 104 for common course numbering information.

Personal Financial Planning, Certificate

Program Design

The Personal Financial Planning certificate program is principally designed for individuals employed in financial planning or in areas related to the financial services industry. Students entering this program are assumed to have a business foundation gained either through college instruction or on-the-job learning.

Student population for this program is likely to include:

- Financial planning practitioners looking to update and strengthen their knowledge or broaden their base.
- Practitioners interested in earning the CFP® professional designation.
- Employees in financial institutions seeking professional development.
- Mature employees seeking a career change.
- Liberal arts college graduates seeking courses in financial planning.
- Students and graduates from business programs who are interested in financial planning courses not offered by their institutions.
- Adult learners returning to the labor force who are interested in working in the financial services industry.

Students who complete each course successfully and who meet all other certification requirements may be eligible to sit for the national Certified Financial Planner (CFP) exam, administered by the CFP Board of Standards.

To sit for this comprehensive exam, a student must complete a minimum of 60 semester credit hours of college level education and a fee must be paid to the CFP Board. Anyone considering seeking the CFP designation must meet individually with the program coordinator to be advised of CFP procedures and certification requirements.

Curriculum

The program may be completed on a part-time basis over three regular semesters. Evening courses will be offered during the fall and spring semesters.

Students should have a financial calculator capable of computing internal rate of return (IRR) to successfully complete the program.

Note: Students enrolled in the Personal Financial Planning certificate program may be interested in a dual certificate in Taxation. With the completion of two additional courses, students may complete a dual certificate in taxation and sit for the Enrolled Agent Examination. Please see the Taxation certificate requirements on page 102. People coming from a non-business background should seek the counseling of the department chairperson or program coordinator.

Required Courses

FNCE 210	Fundamentals of Personal Financial Planning	3
FNCE 220	Risk Management	3
FNCE 230 [‡]	Investment Management	3
ACCT 226	Introduction to Taxation & Financial Planning	3
FNCE 250	Retirement Planning and Employee Benefits	3
FNCE 260	Estate Planning	3

Total Credits Required: 18

Learning Outcomes

Upon successful completion of all Personal Financial Planning certificate program requirements, graduates will

1. Determine whether and how an individual can meet life goals through the proper management of financial resources.
2. Explain issues and concepts related to the overall financial planning process.
3. Apply financial planning concepts, tools, and techniques in an objective, integrated, and comprehensive manner for the benefit of individuals to help them achieve their financial objectives, using the financial planning process.
4. Demonstrate an understanding of their responsibilities to the public, to clients, to colleagues, and to employers in terms of acting in an ethical and professionally responsible manner in all professional services and activities.
5. Demonstrate mastery of the financial planning topics determined by the Certified Financial Planner Board of Standards to constitute the core curriculum for personal financial planning practitioners: gather client data and determine goals and expectations; analyze and evaluate a client's financial status; develop and present a financial plan; calculate and interpret time value of money; demonstrate an understanding of risk management, the process of risk analysis, and life insurance needs analysis; understand investment theory and strategies; explain the features of investment vehicles; calculate measures of investment and portfolio performance; understand the provisions of current Federal tax laws; apply tax planning strategies; and apply retirement and estate planning strategies.

[‡] ACCT 101 (Financial Accounting) is a prerequisite for FNCE 210 and FNCE 230 or permission of program coordinator.

See page 104 for common course numbering information.

Public Relations, Certificate

Program Design

The certificate program in Public Relations, bridging the disciplines of communications and business, is designed to appeal to several populations: new students considering a degree program in communications; employees in other areas of communications seeking retraining, and students with associate or bachelor degrees seeking rapid certification in the skills necessary for entry-level positions in public relations.

The program is designed for maximum flexibility. Students who are already proficient in specific areas of communication or technology will be able to fill in the voids in their training by customizing their courses to their individual needs. Similarly, students seeking a broad range of training in all areas relevant to public relations—including marketing, written and oral communications, videography, desktop publishing and graphics—will achieve a generalist's knowledge.

Transfer Opportunities

Most courses in the certificate program would be transferable to a two- or four-year degree program and all are transferable to the MCC Communication Degree program.

Required Courses

BUS 121, 122 or 240	Business elective — Choose 1	3
COMM 176	Film/Videomaking	3
COMM 201	Public Relations	3
COMM 213/SPCH 213	Effective Speaking	3
COMM 270	Cooperative Education/Work Experience	3
COMM 281	Basic Newswriting	3
COMM 290	Desktop Publishing	3
ENG 111, 112 or 114	English composition elective- Choose 1 (students should consult an advisor)	3
FA 205	Graphic Design	3
COMM 150	Issues in Print, Broadcast & Photojournalism	3

Total Credits Required: 30

Learning Outcomes

Upon successful completion of all Public Relations certificate program requirements, graduates will

1. Design, implement and evaluate a marketing/PR campaign.
2. Write for internal and external publications with an understanding of the needs of the target audiences.
3. Apply basic graphic design principles to newsletters, brochures, reports, and related PR projects.
4. Establish media contacts.
5. Serve as an effective spokesperson for an organization or business.
6. Apply ethical principles to decision making and crisis management.
7. Understand the role of the public relations practitioner within the context of mass communication.
8. Understand the effects of print and broadcast media on the practice of public relations.

See page 104 for common course numbering information.

Real Estate Management, Certificate

Program Design

The Real Estate Management certificate program is designed for persons interested in a part-time career or a career change, and/or for individuals who already have a degree and are looking for a career specialty.

Note: To take a business course numbered 100 or higher, students must be eligible for ENG 111.

Required Courses

BUS 101	Business Law I	3
BUS 102	Business Law II	3
BUS 161	Real Estate Principles and Practices	3
BUS 162	Real Estate Appraisal I (Residential)	3
BUS 231	Basic Advertising Principles	3
BUS 262	Real Estate Appraisal II (Income)	3
BUS 263	Problems in Real Estate Brokerages	3
BUS 264	Real Estate Finance	3
CIS 111	Introduction to Computers	3
GEO* 201	Urban Geography	3

Total Credits Required: 30

Learning Outcomes

Upon successful completion of all Real Estate certificate program requirements, graduates will

1. Generally understand the U.S. legal system and be able to apply principles of contract law, sales law under Article II of the Uniform Commercial Code, and the law of agency to business situations.
2. Discuss partnership and corporation law, property, wills and estates, commercial paper, the bank collection process, secured transactions and creditors' rights and government regulations of business.
3. Possess computer skills appropriate to the real estate field, including: word processing, electronic spreadsheet, Internet browser, database management, and presentation software.
4. Use the Internet for business purposes, including research, marketing, and stock market analysis.
5. Demonstrate advertising strategy, tactics and techniques, including media selection, ad preparation, market research methods, and program evaluation.
6. Apply and demonstrate the principles, methods and techniques of selling.
7. Apply the topics required by the Connecticut Real Estate Commission leading to licensing of real estate salespersons and brokers.
8. Analyze principles, techniques, and the major functions (planning, organizing, lending and controlling) of business enterprise management in order to run successful sales offices.
9. Be a more effective investor in real estate as a broker, developer, lender or property manager.
10. Understand the practical geographic problems of urban areas using census data, interpretation of aerial photographs, G.I.S. and map construction.
11. Work with others, including culturally and intellectually diverse people; think critically; and gain an appreciation for life-long learning.
12. Develop sound ethical and moral professional characteristics.
13. Successfully enter the market place in the real estate field.

See page 104 for common course numbering information.

Social Service, Certificate

Program Design

The Social Service certificate program is designed for students seeking short-term academic and in-service professional development, and for those with extensive social service experience or an academic degree.

Required Courses

HS 101 [†]	Introduction to Human Services	3
HS 152	Work with Individuals and Families	3
HS 201	Work with Groups	3
HS 252	Work with Agencies and Communities	3
HS 292 ^{††}	Field Experience II or	
SOSC 270	Cooperative Education/Work Experience	3
Elective ^{†††}	Undesignated — Choose 3	9
Elective ^{†††}	Social Science — Choose 2	6

Total Credits Required: 30

Learning Outcomes

With the addition of experience in the field of social service and upon successful completion of all Social Service certificate program requirements, graduates will

1. Explain the history of human service movements.
2. Demonstrate knowledge of current human services theories.
3. Identify ethical and legal issues related to human services.
4. Demonstrate knowledge of the language, terms and concepts used in the helping professions.
5. Develop an understanding of professional ethics relating to human services work.
6. Describe a variety of styles and methods of working with individuals, couples, and families.
7. Describe group process and structure and the various roles assumed by individuals in groups.
8. Demonstrate an understanding of systems theory, the ecological perspective, role theory, and methods of decision making.
9. Assess, plan, contract, intervene and evaluate the establishment of working with groups.

[†] Students with several years work experience in human services may request credit by examination for HS 101 or credit by experience for HS 291.

^{††} All students must complete HS 291: Field Experience I.

^{†††} Students are to meet with the program coordinator before choosing electives.

See page 104 for common course numbering information.

Taxation, Certificate

Program Design

The Taxation certificate program is designed specifically for students interested in taking the examination to become an Enrolled Agent. Such a designation allows one to represent tax clients at the first level of the Federal Tax Court. This program is of special interest to public accountants and other tax preparers.

Curriculum

Students may enroll full- or part-time. ACCT 101 (Financial Accounting) is a prerequisite for ACCT 223 and must be completed with a grade of C- or better.

Note: Students enrolled in the Taxation certificate program may be interested in a dual certificate in Personal Financial Planning. Please see the Personal Financial Planning certificate program requirements on page 100 of this catalog.

Required Courses

ACCT 223	Federal Taxes	3
ACCT 224	Advanced Federal Taxes	3
ACCT 226	Introduction to Taxation and Financial Planning	3
FNCE 210	Fundamentals of Personal Financial Planning	3
FNCE 230	Investment Management or	
FNCE 250	Retirement Planning & Employee Benefits	3

Total Credits Required: 15

Learning Outcomes

Upon successful completion of all Taxation certificate program requirements, graduates will

1. Complete simple accounting problems and be familiar with current financial accounting standards and practices.
2. Understand generally accepted accounting principles and their manual and computerized spreadsheet applications.
3. Prepare complete financial statements for sole proprietorships in compliance with current accounting standards and practices.
4. Prepare the following tax returns and supporting schedules under simulated conditions: 1040, 1065, 1120 and 1120S.
5. Possess computer competencies for maximum efficiency including the use of accounting, spreadsheet, presentation and tax software.
6. Understand the provisions of current tax laws and the business and investment decisions they affect.
7. Understand all phases of the tax code and be able to focus on tax problems and the multiple alternatives that must be analyzed.
8. Work with others, including culturally and intellectually diverse people; think critically; and gain an appreciation for life-long learning.
9. Develop sound ethical and moral professional characteristics.
10. Successfully enter the marketplace in the field of taxation.

See page 104 for common course numbering information.

Therapeutic Recreation, Certificate

Program Design

The Therapeutic Recreation certificate program is designed for persons who seek academic and in-service professional development in the field of therapeutic recreation. This program enables the student to meet standards established in the Public Health Code of the State of Connecticut to work in chronic and convalescent nursing homes and other facilities with nursing supervision.

Therapeutic recreation is a specialized allied health field within the recreation profession. Associated with leisure aspects of medical treatment, therapeutic recreation attempts to physically and socially rehabilitate patients who have chronic physical, psychological, and social disabilities. It involves recreation services that give the patient an opportunity to participate in recreational, leisure and group activities specifically designed to aid in the recovery or adjustment to illness, disability or a specific social problem.

Curriculum

Students may enroll in this certificate program full- or part-time and attend classes days or evenings.

Required Courses

Elective	Gerontology	3
Elective	Choose from fine arts, music, theater, <u>or</u>	
SOSC 110	Introduction to Wellness	3
ENG 111	College Reading and Writing	3
PSYC 111	General Psychology	3
REC 101	Introduction to Recreation and Leisure	3
SOSC 270	Cooperative Education/Work Experience	3
THRC 115	Introduction to Principles of Therapeutic Recreation	3
THRC 116	Process and Techniques in Therapeutic Recreation	3
THRC 215	Therapeutic Recreation Programs: Planning and Implementation	3
THRC 230	Leisure and Aging	3

Total Credits Required: 30

Learning Outcomes

Upon successful completion of all Therapeutic Recreation certificate program requirements, graduates will

1. Meet the state health code requirements to hold the position as a therapeutic recreation director in the State of Connecticut.
2. Demonstrate the ability to comprehend and apply the necessary skills required of a therapeutic recreation director.
3. Demonstrate the ability to comprehend the needs of individuals with special needs and the positive outcomes of therapeutic recreation intervention.
4. Demonstrate the ability to successfully assess, plan, implement, and evaluate therapeutic recreation programs for individuals with special needs both in a clinical and community setting.
5. Have developed leadership, interpersonal, and communication skills necessary to work in a healthcare or community based setting.
6. Demonstrate professional behavior consistent with the therapeutic recreation code of ethics.

See page 104 for common course numbering information.

Courses

Course offerings are subject to change.

The courses in this section are grouped by subjects that are listed alphabetically. Within each subject group, the courses are listed in numerical order, the lowest first and the highest last.

Courses with numbers 099 and below are non-credit courses. Courses with numbers in the 100-199 range are considered first-year courses. Courses numbered 200 or higher are considered second-year courses.

The semester in which a course is generally offered is indicated by the codes: Fa = Fall, O = Occasional, Sp = Spring, and Su = Summer. Students and their advisors may use these designations in determining course selection for any particular semester.

Electives - Within an academic program, courses are either required or elective. Elective courses fall into broad subject areas of study in the liberal arts and sciences. These broad subject areas are the humanities, the natural sciences and the social sciences. Courses may also be business electives or may be undesignated. Each course has an elective designation indicated in bracket at the end of the course description.

General Education Requirements - In addition, all programs have specific general education requirements. General education requirements assure that students have exposure to a range of courses in specific areas of the curriculum. The general education requirements are grouped into six modes. The general education modes and courses can be found in the catalog on pages 29-30.

Common Course Numbering - The community colleges of Connecticut are in the process of coordinating courses on all campuses so that courses have the same numbering system at all colleges. As this process is undertaken, courses will be changing their designations and numbers until all courses can be aligned. For the most updated information on common course numbering, students are encouraged to speak with program coordinators and the Registrar's Office. Some courses listed below have already undergone this process (Physical Therapy Assistant and Surgical Technology courses) and others will change during the 2003-2004 academic year.

When choosing courses, it is important to choose the type of elective or general education mode specified within your program of study. Students should seek the advice of a counselor or faculty member when choosing courses.

A complete list of the courses being offered is published each semester in the class schedule which is available in the Registrar's Office. A list of current Continuing Education courses is available in the Continuing Education Office. Course offerings are subject to change.

Accounting

All accounting courses numbered 100 or higher require students to be eligible for ENG 111 and MATH 101 or higher.

ACCT 098: Introduction to Accounting I

This course is designed to introduce students to accounting theory. Emphasis in the course includes the accounting cycle, bank checking accounts, and payroll. (O) no credit

ACCT 101: Financial Accounting

Theory and practice of accounting applicable to the accumulation, external reporting, and external uses of financial accounting information. [B] (Fa,Sp,Su) 4 credits

ACCT 102: Managerial Accounting

Basic concepts and practice of accounting's role in providing information to managers to assist in their planning, control and decision-making activities. Topics include cost accounting, cost behavior relationships, analyses for managerial decisions, and the budget process. Prerequisite: C or better in ACCT 101. [B] (Fa,Sp,Su) 4 credits

ACCT 105: Accounting and Business Applications Software

This course teaches students to build a company's accounting system in QuickBooks 99. Students will learn to download QuickBooks 99 data into an Excel spreadsheet and build linked statements, footnotes and graphs. Students will also learn PowerPoint and Turbo Tax. Prerequisites: CIS 106 and ACCT 101. [B] (Fa,Sp) 3 credits

ACCT 106: Certified Bookkeeper Course #1:

This course provides the accounting student with an essential background in learning course material and preparing for the first Certified Bookkeeper exam. The examination verifies the attainment of the knowledge and skill required to conduct all key bookkeeping and accounting functions through the adjusted trial balance and basic payroll skills for companies with up to 100 employees. In Course One, the student will learn all aspects of mastering adjusting entries, correction of accounting errors and the qualifications required to obtain the Certified Bookkeeper description. The student will take and correct the mock exams and learn test-taking skills. The student will also learn about the code of ethics to which the Certified Bookkeeper must attest before certification. Note: There is a separate fee associated with the certification exams. Prerequisite: C or better in ACCT 101 or permission of instructor. [B], (O), 3 credits.

ACCT 107: Certified Bookkeeper Course #2:

This course is designed to provide the accounting student with an essential background in learning course material and preparing for the Certified Bookkeeper Exam #2. The student will be introduced to exam content and trained in preparation required for passage of the exam. The course content will include mastering inventory, mastering payroll and mastering depreciation. The student will complete mock exams designed to test their knowledge and adequately prepare them for successful passage of the certification exam. Note: There is a separate fee associated with the certification exams. Prerequisite: C or better in ACCT 101 or permission of instructor. [B], (O), 3 credits.

ACCT 108: Payroll Accounting:

This course provides an overview of the role of a payroll accountant and the payroll accounting function within the business entity and will provide the accounting student with an essential background in learning payroll accounting laws, regulations and methodology. Also covered are the need for timely and accurate payroll data as a key part of the management function, tax rules, tax rate and tax reports. In this course students will be working with specialized payroll accounting software. Prerequisite: C or better in ACCT 101 or permission of instructor. [B], (O), 3 credits.

ACCT 110: Accounting Software Application

Includes software application for a complete accounting cycle and other areas covered in ACCT 101. Prerequisite: C or better in ACCT 101 and CIS 111. [B] (O) 1 credit

ACCT 201: Intermediate Accounting I

This course covers fundamental processes of accounting; working capital; investments; plant and equipment acquisition, depreciation and disposal; and intangibles. Students will work on computers on all exercises, exams and projects during classes. Prerequisite: C or better in ACCT 102, ACCT 105, and CIS 106.

ACCT 202: Intermediate Accounting II

This course covers plant and equipment depreciation, reevaluations, intangibles, long-term liabilities, stockholder's equity, analytical processes, statement of cash flows, pensions, leases, publicly held companies. Students will work on computers on all exercises, exams and projects during classes. Prerequisite: C or better in ACCT 201. [B] (Sp) 4 credits

ACCT 213: Cost Accounting

This course covers principles of cost accounting for manufacturing and business. Prerequisite: C or better in ACCT 102. [B] (Sp) 3 credits

ACCT 223: Federal Taxes

Theories and laws of individual income tax returns will be taught. Prerequisite: C or better in ACCT 101. [B] (Fa) 3 credits

ACCT 224: Advanced Federal Taxation

Corporation, partnership, estate and trust taxation, including tax administration and practice, will be taught. Prerequisite: ACCT 223. [B] (Sp) 3 credits

ACCT 225: Practical Taxation

Researching and solving taxation problems for individuals, partnerships, corporations; S Corporations, estates, trusts, state capital gains, state successions, and fiduciaries using actual tax forms and simulated financial situations will be taught. Prerequisite: ACCT 224. [B] (O) 3 credits

ACCT 226: Introduction to Taxation & Financial Planning

This course focuses on the provisions of current tax laws and the business and investment decisions they affect. Prerequisite: ACCT 223 or permission of the department chairperson. [B] (Sp) 3 credits

ACCT 227: Taxation and Financial Planning

This course focuses on tax problems and sets out the multiple alternatives that must be analyzed. Prerequisite: ACCT 226. [B] (O) 3 credits

ACCT 251: Non-Profit Accounting:

This course is designed to provide the accounting student a foundation for working in a non-profit organization. This foundation includes federal, state, local governmental fund accounting principles. In addition this course will include accounting for schools, hospitals, and fund-raising organizations. Students may take this course as substitute for cost accounting or may wish to take this course to add to their accounting skills and to broaden their job opportunities in these accounting career fields. Prerequisites: C or better in ACCT 102, ACCT 105, CIS 106. [B] 3 credits.

ACCT 270: Cooperative Education/Work Experience

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including corporations, small businesses and state offices. Prerequisites: 15 completed credit hours in the Accounting program including ACCT 101, 102, and 201. [B] (Fa,Sp) 3 credits. *Please refer to page 19 for more information and general prerequisites for Cooperative Education/Work Experience.*

Allied Health**AH 090: Allied Health Study Skills**

A pass/fail study skills course for Pre-Allied Health students to learn how to effectively study using various learning strategies. Required prior to beginning Allied Health Program courses. Exception granted for those who have a grade point average of 3.2 or better, or have taken ENG 103 or equivalent study skills course. Class: 15 hours. (Su) 0 credits

AH 101: Introduction to Allied Health

A course that will allow students to gain an understanding of Allied Health programs and the duties and responsibilities necessary to each profession before making a definite career choice. They will also gain information about the assistance available at the College, to overcome deficiencies that prevent them from acceptance or carrying out career goals. Class: 1 hour per week. (Fa) 1 credit

AH 270: Cooperative Education/Work Experience

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including hospitals, nursing homes, laboratories. Prerequisites: 15 completed credit hours in Allied Health programs. (Fa,Sp) 3 credits. *Please refer to page 19 for more information and general prerequisites for Cooperative Education/Work Experience.*

American Sign Language See Sign Language**Anthropology****ANTH 101: Introduction to Anthropology**

This course tries to untangle the evolution of the human species through fossil discovery and genetic insight; it seeks the similarities and differences between humans and the other primates; it takes the student from cave paintings in southern France to a "dig" in the Sinai Desert, from an extinct volcanic crater in Africa to a shamanistic dance in Nepal and a political feast in the Amazon. It does all this in search of answers to the question: What does it mean to be human? [L,S] (Fa,Sp) 3 credits

ANTH 150: Cross Cultural Issues

Anthropology helps us to understand people whose ways of life are different from our own but with whom we share common needs, planet Earth and a common destiny. This course will help further the understanding of cultures that are currently immigrating to the U.S. from Southeast Asia, Latin America, South America, and the Caribbean. Class: 3 hours per week. [L,S] (O) 3 credits

ANTH 220: Health, Healing and Culture

This is a cross-cultural survey course that investigates the concepts of healing, health and sickness from a sampling of countries throughout the world. The aim is to understand the importance of culture in determining the etiology and treatment of diseases and mental disorders. The objective will be to understand and integrate the various belief systems with the practices that identify the disease and effect the cures. [L,S] (O) 3 credits

Astronomy**ASTR 110: Introduction to Astronomy**

This is an introductory descriptive astronomy course with emphasis on the earth and its motions, the moon and planets, the sun, and stars and galaxies. Observation sessions will be required. Class: 3 hours per week. [L,N] (Fa,Sp,Su) 3 credits

ASTR 110L: Astronomy Laboratory

A process-oriented laboratory experience in selected topics in elementary astronomy. Students will develop appropriate qualitative and quantitative models and understandings for the physical and dynamical characteristics of celestial bodies - the moon, planets, asteroids, comets, meteors, stars, star associations and clusters, galaxies and galactic clusters - through the use of direct observation and measurement as well as the use of star globes, charts, catalogues, graphs, photographs and CCD images. A scientific calculator is required. Laboratory: 2 hours per week. Prerequisite: MATH 101. [L,N] (Fa) 1 credit

Biology

BIO 100: Principles of Biological Science

This course is a study of the fundamental principles of biology as they relate to current issues. It may be used to fulfill the general education natural and physical science requirement, and is recommended for students who do not need a full year of laboratory biology. No dissection is required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: eligibility for ENG 111 [N] (Fa,Sp) 4 credits

BIO 101: General Biology I

This course is a study of the fundamental principles of biology concerning the structure and function of cells, heredity, and biotechnology. Recommended for LAS students, especially those who will be pursuing science-related careers. No dissection is required. Students who have not had a high school biology course, or who had one more than 5 years ago, should strongly consider enrolling in BIO 100. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: eligibility for ENG 111 [L, N] (Fa,Sp) 4 credits.

BIO 102: General Biology II.

This course is a study of unicellular and multicellular organisms and their evolutionary relationships. Both plants and animals are discussed. Some dissection is required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: BIO 101. [L,N] (Fa,Sp) 4 credits

BIO 104: Applied Nutrition

Offered is an introduction to the study of nutrition as it relates to the establishment and promotion of wellness in everyday life. This course focuses on an understanding of basic principles and concepts of nutrition with applications towards examples drawn from the hospitality industry. Recommended for HOSP and culinary arts students. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. Not open to students who have completed BIO 114. [N] (Fa,Sp) 3 credits

BIO 110: Human Biology

This course is a survey of the various organ systems of the human body, stressing anatomic and physiologic interrelationships. Not open for credit to students who have passed any higher-numbered anatomy or physiology course. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp) 3 credits

BIO 112: Human Biology

This course is BIO 110 plus a three-hour laboratory. Not open to students who have passed another human anatomy and physiology course. For those students who have taken BIO 110, BIO 112 will be considered a repeat and will be awarded only one additional credit. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp) 4 credits

BIO 114: Principles of Nutrition

An introduction to the study of human nutrition with emphasis on the scientific bases of facts and controversies surrounding issues of foods and diets will be taught. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. Not open to students who have completed BIO 104. [L,N] (Fa,Sp,Su) 3 credits

BIO 115: Biological Aspects of Human Sexuality

This course includes: anatomy and physiology of human reproductive systems and the nature of human sexual responses, dysfunctions and diseases. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp) 3 credits

BIO 121: General Zoology

Offered is a study of the animal kingdom and evolutionary trends that resulted in a diverse array of animals. Recommended for general studies and transfer students. Some dissection is required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (O) 4 credits

BIO 141: Microbiology

The morphology, physiology and pathology of microbial organisms will be taught. Class/laboratory: 6 hours per week. Prerequisites: any biology laboratory course or enrollment in an Allied Health program, and eligibility for ENG 111. [L,N] (Fa,Sp,Su) 4 credits

BIO 152: Human Anatomy and Physiology I

The anatomy and physiology of the integumentary, skeletal, muscular, nervous and endocrine organ systems are discussed and explored in appropriate laboratory investigations. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisites: BIO 101, or BIO 112, or CHEM 110, and eligibility for ENG 111. [L,N] (Fa,Sp) 4 credits

BIO 153: Human Anatomy and Physiology II

The anatomy and physiology of the special senses, digestive, respiratory, cardiovascular, lymphatic, urinary and reproductive organ systems are discussed and explored in appropriate laboratory investigations. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: BIO 152. [L,N] (Fa,Sp,Su) 4 credits

BIO 155: Women's Health

This course is a study of current issues and practices related to women's health. Emphasis will be placed on female anatomy and physiology, the changes encountered in a woman's body over the lifetime and related aspects of health and disease. Upon successful completion of the course, the student should be scientifically and medically knowledgeable about the female body and be an "informed consumer" of medical information and practices concerning today's female population. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp) 3 credits

BIO 160: People and the Environment

This course is an introduction to basic principles of ecology and the evaluation of some of the major environmental issues. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (O) 3 credits

BIO 201: Pharmacology

This course is an introduction to the effects of drugs on human organ systems. Class: 3 hours per week. Prerequisites: Any human biology or an anatomy and physiology course, and eligibility for ENG 111. [L,N] (Sp) 3 credits

BIO 203: Topics in Genetics

This course deals with classical principles of human genetics as well as advances in research in areas such as recombinant DNA, biotechnology, and mapping and diagnosis of human genetic diseases. Emphasis will be placed on understanding the origin and extent of genetic diversity in humans and the role of evolution in shaping human genotypes. *This course is required for the Biotechnology Option and is offered at Middlesex Community College, Middletown, CT.* Prerequisites: BIO 101, BIO 152 and BIO 105⁺ or permission of the instructor. 3 credits

⁺Prerequisite course BIO 105 is offered at Middlesex Community College.

BIO 206: Molecular Biotechniques

A laboratory course designed to introduce molecular biology techniques such as plasmid and chromosomal DNA isolation, restriction enzyme mapping, agarose gel electrophoresis, and manipulation of DNA fragments. Three hours of lecture and three hours of laboratory per week. *This course is required for the Biotechnology Option and is offered at Middlesex Community College, Middletown, CT.* Prerequisites: BIO 141 and CHEM 104⁺ or permission of the instructor. 4 credits

⁺Prerequisite course CHEM 104 is offered at Middlesex Community College.

BIO 210: Human Pathology

This course is an introduction to the study of human disease. Class: 3 hours per week. Prerequisites: Any human biology or human anatomy and physiology course, and eligibility for ENG 111. [L,N] (Fa) 3 credits

BIO 260: Principles of Genetics

This intermediate level course is designed to extend the understanding of college level biology students to encompass an understanding of heredity and of the hereditary material with particular attention to current theories and to the quantitative aspects of genetics. Prerequisites: BIO 101 and MATH 101 with a grade C or better. [L,N] (O) 3 credits

BIO 299: Biotechnology Internship

Student will work a minimum of 10 hours per week in an industrial biotechnology laboratory. *This course is required for the Biotechnology Option and is offered at Middlesex Community College, Middletown, CT.* Prerequisite: permission of the instructor. 3 credits.

Business

All business courses numbered 100 or higher require students to be eligible for ENG 111 except BUS 111.

BUS 099: Introduction to Business, Survey of Business I

This course is the first of a two-course sequence (BUS 099 and BUS 100), offering an introductory survey of American business. Students receive practical instruction, a first-hand look at business through field trips, and experience in study skills including reading, writing, critical thinking, and discussion. Areas of business covered are: business structures, management, plant production, human resources and labor relations. (O) no credit[†]

[†]No credit for BUS 099 until both courses (BUS 099 and BUS 100) are successfully completed. Three credits are earned for this two-course sequence. This two-course sequence may be taken as an alternative to BUS 111.

BUS 100: Introduction to Business, Survey of Business II

This course is the second of a two-course sequence (BUS 099 and BUS 100), continuing an introductory survey of American business. In addition to skills learned in BUS 099, this course will focus on: marketing, accounting, corporate finance, the banking system, and the securities markets. Also covered are the legal and ethical influences on business as well as the international business environment. (O) 3 credits[‡]

[‡]Credit for BUS 100 is given only when both courses (BUS 099 and BUS 100) are successfully completed. Three credits are earned for this two-course sequence. This two-course sequence may be taken as an alternative to BUS 111. Prerequisite: BUS 099.

BUS 101: Business Law I

This course is an introduction to the law, including crimes and torts, contracts, agency and sales law. [B] (Fa,Sp) 3 credits

BUS 102: Business Law II

Partnership and corporation law, property, wills and estates, commercial paper, the bank collection process, secured transactions and creditors' rights and government regulation of business are taught. Prerequisite: BUS 101. [B] (Fa,Sp) 3 credits

BUS 111: Business Environment

A survey of major business topics such as management, marketing, accounting, finance, computer science, organizational behavior, production, as well as the social and economic environment of business. [B] (Fa,Sp) 3 credits

BUS 118: Small Business Operation

This course covers the fundamentals of operating a small business. Students will discuss topics that arise before a small business is opened, the process of determining customer needs and satisfying them, how to create and maintain competitive advantage, useful information on the technical aspects of running a small business, and the on-going process of managing a small business. Prerequisites: eligibility for ENG 111 or permission of the instructor. [B] (Fa,Sp) 3 credits

BUS 121: Principles and Methods of Marketing I

This course covers marketing methods and institutions, including analysis and interrelationship of the marketing mix. Application of basic management and marketing strategy planning methods, and performance computations related to marketing efficiency. Prerequisite: eligible for ENG 111 or "C-" or higher in BUS 111. [B] (Fa) 3 credits

BUS 122: Principles and Methods of Marketing II

Marketing theory and its application to product planning, price determination, government regulation, and distribution cost analysis through planned class activities will be taught. Prerequisite: BUS 121. [B] (Sp) 3 credits

BUS 161: Real Estate Principles and Practices

This is an introductory course in real estate, covering topics required by the Connecticut Real Estate Commission, leading to licensing of real estate salespersons and brokers. Designed for students who plan to enter the real estate profession or others who wish to obtain real estate knowledge to help them in business. [B] (Fa) 3 credits

BUS 162: Real Estate Appraisal I

Required by the Connecticut Real Estate Commission for licensing of real estate brokers. This course covers methods of appraising residential property. Prerequisite: BUS 161. [B] (Sp) 3 credits

BUS 163: Introduction to Property Management

This course is an overview of the property management field including the legal, interpersonal, maintenance and accounting administration functions of the property manager. Specific practices and problems dealing with the management of all kinds of commercial properties. [B] (O) 3 credits

BUS 201: Business Management

This course is an analysis of principles, techniques and the major functions (planning, organizing, and leading) of business enterprise management. [B] (Fa,Sp) 3 credits

BUS 211/ECON 211: Money and Banking

This course deals with the role and supply of money, the Federal Reserve system, the principles of banking, and the structure of financial institutions. Monetary policy and its application are emphasized. Class: 3 hours per week. Prerequisite: ECON 101. [L,S] (O) 3 credits

BUS 214: Managerial Communications

This is a practical course in oral and written managerial communication skills, covering the writing of letters, memos and reports, editing techniques, and the preparation of resumes and cover letters. Prerequisite: ENG 111 or C- or higher in BUS 111. [B] (Fa,Sp) 3 credits

BUS 215/PHL 115: Business Ethics

This course will examine the full extent of the relationship between business and ethics: The philosophical foundation for capitalism will be examined as will the application of ethical values and principles to employee/employer interactions. Class: 3 hours per week. Students are strongly urged to take PHL* 101 or the equivalent; or any 100 or 200 level English course to prepare for this course. [B,H,L] (Fa) 3 credits

BUS 220: Business and Strategic Planning

This course will provide students with a detailed level of understanding of both Business and Strategic Plans. Upon researching and evaluating plans for small businesses, students will prepare a Business Plan, which would be used, for exploring a business opportunity or soliciting funds and a Strategic Plan to ensure the health and direction of a business. Prerequisite: BUS 118 or permission of the instructor. [B] (Fa,Sp) 3 credits

BUS 221: Sales and Techniques of Selling

This course is an introduction to the principles, methods and techniques of selling, and the application of these principles through individual sales demonstrations. Prerequisite: eligible for ENG 111 or "C-" or higher in BUS 111. [B] (Fa,Sp) 3 credits

BUS 231: Basic Advertising Principles

This course is a study of advertising strategy, tactics and techniques, including media selection, ad preparation, market research methods, and program evaluation. Prerequisite: eligible for ENG 111 or "C-" or higher in BUS 111. [B] (Sp) 3 credits

BUS 240: Organizational Behavior

A survey of the psychological factors that influence the individual in the work setting. Includes employee attitudes, motivation, group dynamics, decision making, leadership, assessment and training as an introduction to human resource management. (L,S) (Fa,Sp) 3 credits

BUS 241: Corporation Finance

A study of the principles and techniques of financial management, covering money and capital markets, financial analysis, working capital management, long term financing, time value of money, risk, leverage, and cost of capital. Prerequisite: ACCT 102. (B) (Fa, Sp) 4 credits

BUS 244/HIST 244: The Development of American Business

The goal of the course is to provide students interested in management with an historical, philosophical and economic framework for dealing with a rapidly changing business environment. [B,L,S] (O) 3 credits

BUS 250: Electronic Commerce

This course will allow students to explore the major opportunities, limitations, and issues of managing business on the Web today. Students will learn what electronic commerce is, how it is being conducted and managed, and its major opportunities, limitations, issues, and risks, taking a managerial orientation and interdisciplinary approach. Real world cases are offered with each chapter to offer an in-depth analysis of topics. Prerequisite: BUS 118, CIS 106 *may be taken concurrently*, or permission of the instructor. [B] (Sp) 4 credits

BUS 252: Retailing

A study of retailing methods and institutions including analysis of their behavior in a competitive environment. Prerequisite: eligible for ENG 111 or "C-" or higher in BUS 111. [B] (Fa,Sp) 3 credits

BUS 260: Relationship Marketing

The purpose of this course is to give the student a solid foundation in customer service systems. Students will learn concepts and skills necessary to perform effectively in a customer driven service economy. This course will focus on the concepts and applications of communications, strategic planning, teamwork, coaching, and vision building, as well as an introduction to Total Quality Management. This course emphasizes the importance of development and retention of repeat customers and business buyers. Class 3 hours per week. [B] (Sp) 3 credits

BUS 262: Real Estate Appraisal II

This is a third course in real estate leading to a broker's license in the State of Connecticut that covers methods and procedures for the appraisal of income property. Prerequisite: BUS 162. [B] (O) 3 credits

BUS 263: Problems in Real Estate Brokerages

This course assists potential real estate brokers in managerial techniques and principles of operating successful sales offices. Prerequisite: BUS 161. [B] (O) 3 credits

BUS 264: Real Estate Finance

This course prepares the student to be a more effective investor in real estate as a broker, developer, lender or property manager. Prerequisite: BUS 161. [B] (O) 3 credits

BUS 270: Cooperative Education/Work Experience

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including corporations, small businesses, financial institutions and governmental agencies. Prerequisites: 15 completed credit hours in Business Administration, Accounting, Computer Information Systems or Marketing programs. (Fa,Sp) 3 credits. *Please refer to page 19 for more information and general prerequisites for Cooperative Education/Work Experience.*

BUS 271: International Business

This course provides students with a foundation for conducting international business and a general understanding of international corporate and government operations. The course will undertake a comprehensive overview of international business designed to provide a global perspective on international trade including topics in: foreign investment, international marketing, the operations of multinational corporations, and government relations. [B] (O) 3 credits

BUS 272: Conducting Business in Developing Nations

This course provides students interested in developing nations or the Third World with a background for conducting business or working for the U.S. government in these nations. Focus on special regions of the world will include: Africa, Latin America, Asia, Eastern Europe and the Middle East. [B] (O) 3 credits

Business Office Technology

† NOTE: AVT (Audio-Visual Tutorial) is self-paced media-assisted instruction.

BOT 100A: Keyboarding for Information Processing

Keyboard mastery for computer input. AVT instruction. ‡ Not for BOT students. [B] (Fa,Sp) 1 credit

BOT 103: Office Writing Procedures

Provides students with opportunities to acquire skills to produce and edit mailable business documents, letters, articles and reports. [B] (Fa, Sp) 3 credits

BOT 107: Beginning Keyboarding

Keyboard mastery using computers with Microsoft Word software, includes development of speed and accuracy; introduction to the preparation of business correspondence, letters and reports and the development of proofreading skills. [B] (Fa,Sp) 3 credits

BOT 108: Advanced Keyboarding

Further development of speed and accuracy using computers with Microsoft Word software for the preparation of business documents, forms, tables and reports, development of speed, accuracy and proofreading skills. Prerequisite: C- or better in BOT 107. [B] (Fa,Sp) 3 credits

BOT 109: Machine Transcription

Fundamentals of machine transcription including review of keyboarding skills, grammar, punctuation, spelling, capitalization and proofreading. AVT instruction.[‡] Prerequisite: BOT 107 or permission of instructor. [B] (Fa,Sp) 3 credits

BOT 113: Speedwriting I

Fundamentals of speedwriting including phrasing and brief forms; introduction to taking dictation and transcription. AVT instruction.[‡] Prerequisite: BOT 107. [B] (Fa,Sp) 3 credits

BOT 115: Records Management

Creation, maintenance and disposition of records including alphabetic, geographic, subject, numeric, and chronological indexing, retrieving and storage utilizing manual and computer methods. AVT instruction.[‡] Prerequisite: BOT 107. [B] (Fa,Sp) 3 credits

BOT 117: Keyboarding - Skill Building I

This course provides students who have completed either BOT 100A or BOT 107 the opportunity to continue to increase keyboarding speed and accuracy while analyzing typing techniques and prescribing practice that will enable the student to key faster and with greater accuracy. AVT instruction.[‡] Prerequisite: BOT 100A or BOT 107 or permission of instructor/coordinator. [B] (Fa,Sp) 1 credit

BOT 118: Keyboarding - Skill Building II

This course provides students who have completed BOT 117 the opportunity to continue to increase keyboarding speed and accuracy while analyzing typing techniques and prescribing practice that will enable the student to key faster and with greater accuracy. AVT instruction.[‡] Prerequisite: BOT 117 or permission of instructor/coordinator [B] (Fa,Sp) 1 credit

BOT 124: Microsoft Word for Windows

Provides a working knowledge of word processing concepts using Microsoft Word for Windows software. Prerequisite: BOT 107 or 35 words-per-minute keyboarding skill. [B] (Fa,Sp) 3 credits

BOT 125: Introductory Microsoft Word for Windows

Fundamentals of the Microsoft Word for Windows software package. Prerequisites: CIS 106; knowledge of the keyboard. [B] (Sp) 1 credit

BOT 126: Intermediate Microsoft Word for Windows

Intermediate applications of the Microsoft Word for Windows software package. Prerequisite: BOT 125. [B] (Sp) 1 credit

BOT 127: Advanced Microsoft Word for Windows

Advanced applications of the Microsoft Word for Windows software package. Prerequisite: BOT 126. [B] (Sp) 1 credit

BOT 130: Microsoft Office Suite Applications

This course provides students with further advancement and enhancement of their office skills using the Microsoft Office Suite. Fundamentals of Microsoft Word, Excel, PowerPoint, Access and Outlook will prepare students for tasks performed by office support personnel in today's office environment. These applications are widely used in today's business and professional offices. Prerequisite: BOT 107 or permission of the instructor. [B] (Fa,Sp) 3 credits

BOT 140: Medical Coding I

This course is an in-depth study of basic International Classification of Disease, Clinical Modification (ICD-9-CM) and Current Procedural Terminology (CPT-4) coding. Diagnoses, procedures, signs and symptoms will be studied and coded by students using the necessary textbooks. The flow of medical records from physician's office to hospital discharge will be

tracked for insurance, risk management and case study purposes. Prerequisite: BOT 241. [B] (Fa,Sp) 3 credits

BOT 141: Medical Coding II

This course is a continuation of International Classification of Disease, Clinical Modification (ICD-9-CM) and Current Procedural Terminology (CPT-4) coding. Students will utilize medical records and case histories to code the diagnoses and procedures according to the level of care received in the appropriate medical facilities. Prerequisite: BOT 140. [B] (Fa,Sp) 3 credits

BOT 142: Foundations/Management of Medical Insurance

This course is designed to develop those abilities and skills that will enable students to define and explain the types of health insurance policies, contracts, and guideposts. Comparisons of Blue Cross/Blue Shield, as well as analysis of the insurance forms and application information to the forms is included. Emphasis will be placed on legal issues and medical record confidentiality. Prerequisite: BOT 241. [B] (Fa) 3 credits

BOT 143: Computers in the Medical Office

The student will become familiar with a variety of situations using specially designed medical software. Students will learn to input patient information, schedule appointments, and handle billing. In addition, they will produce various lists and reports, and learn to handle insurance claims both on paper and electronically. May be taken concurrently with BOT 141. [B] (Sp) 3 credits

BOT 151: Customer Service Skills

This course will look at the characteristics of technical customer support and at soft and self-management skills needed to deliver excellent customer support. Topics include: developing strong listening and communication skills; winning telephone skills; technical writing skills for support professionals; handling difficult customer situations; solving and preventing problems; working as a team; minimizing stress and avoiding burnout. Class: 3 hours per week. Prerequisite: eligibility for ENG 111 and MATH 101. (Sp) 3 credits

BOT 203/ENG 203: Advanced Editing and Proofreading

An advanced course designed to hone written communication skills, including editing and proofreading documents. This course will also help students develop a command of standards and conventions of written English. Prerequisite: ENG 111 or permission of instructor. [B,H,L] (Fa) 3 credits

BOT 210: Machine Transcription/Med I

This course teaches the fundamentals of machine transcription and the development of medical reports, patient records, histories/physicals, and correspondence using appropriate reference sources. Keyboarding skills, grammar, punctuation, spelling, capitalization, and proofreading are covered. AVT instruction.[‡] Prerequisites: BOT 107, BOT 241; must be eligible for ENG 111. [B] (Fa,Sp) 3 credits

BOT 211: Machine Transcription/ Med II

Further development of medical machine transcription demonstrating the ability to effectively incorporate English usage, medical terminology, proofreading and editing skills. Students will meet progressively demanding medical transcription accuracy and productivity standards. AVT instruction.[‡] Prerequisite: BOT 210. [B] (Fa, Sp) 3 credits

BOT 222: Administrative Office Procedures

Application of previously acquired office skills to the tasks and responsibilities encountered by the administrative assistant in today's business office. Topics include: professional image, human relations, job attitude, time management, decision making, technology and records management. Office projects relevant to students' programs will also be included. Prerequisite: BOT 107 or permission of instructor. [B] (Sp) 3 credits

BOT 224: Office Accounting

Provides students with knowledge of the accounting cycle and procedures for professional offices. Students will also be prepared to handle personal financial management. [B] (Fa) 3 credits

BOT 233: Legal Terminology, Forms and Documents

Students will be introduced to legal terminology and become familiar with widely used legal forms and documents. AVT instruction.[‡] Prerequisite: BOT 107 and BOT 124 must be taken before or concurrently with this course. [B] (Fa,Sp) 3 credits

BOT 234: Legal Terminology and Transcription

This course is a continuation of BOT 233 including a review of legal terminology and includes machine transcription of legal materials in the preparation of legal documents. AVT instruction.[‡] Prerequisite: BOT 233. [B] (Fa,Sp) 3 credits

BOT 241: Medical Terminology

Introduction and mastery of basic medical terminology through presentation of word roots, prefixes and suffixes. AVT instruction.[‡] [B] (Fa,Sp) 3 credits

BOT 261: Document Creation and Management

Provides students with an opportunity to manage files electronically and apply advanced functions to documents and business records using Microsoft Office Applications. Prerequisite: BOT 130 [B] (Fa) 3 credits.

BOT 262: The Integrated Office

The course includes project-based activities applying word processing, spreadsheets, database, and electronic presentations, as well as e-mail, and Internet applications. Tasks are geared to real-life applications that will increase knowledge of the office suite and its integration, the Internet, and desktop publishing. These skills will enhance employability. Prerequisite: BOT 130 [B] (Sp) 3 credits

BOT 270: Cooperative Education/Work Experience

This course provides students with the opportunity to apply classroom theory in an actual work setting related to their program of study. Prerequisites: 12 completed credit hours in Administrative Assistant, Legal; Administrative Assistant, Medical; or Administrative Assistant, Office and the completion of BOT 222. [B] (Fa,Sp) 3 credits. *Please refer to page 19 for more information and general prerequisites for Cooperative Education/Work Experience.*

CAD (Computer-Aided Design)

See Manufacturing.

CAM (Computer-Aided Manufacturing)

See Manufacturing.

Chemistry**CHEM 104: Allied Health Chemistry II**

An introduction to organic and biochemistry for transfer students planning careers in the allied health professions and other biology related majors that do not require general chemistry. Three hours of lecture and three hours of laboratory per week. *This course is required for the Biotechnology Option and is offered at Middlesex Community College, Middletown, CT.* Prerequisites: CHEM 111 or CHEM 103[‡], or CHEM 105[‡], or CHEM 121[‡], or permission of the instructor. 4 credits

[‡]Note: prerequisite courses CHEM 103, 105 and 121 are offered at Middlesex Community College.

CHEM 110: Elements of Chemistry

A brief survey of atomic structure, chemical bonding, stoichiometry, periodicity, properties of gases, solutions, acid-base theory and an introduction to kinetics and equilibria will be taught. This is a one-semester course in general chemistry. Strongly recommended for students with no prior chemistry experience. Scientific calculator required. Class meets for 6 hours per week for integrated lecture and laboratory. Prerequisite: MATH 098 or math placement test. [L,N] (Fa,Sp) 4 credits

CHEM 111: College Chemistry I

The principles of chemistry, including atomic structure, periodicity, stoichiometry, reactions in solution, thermochemistry, chemical bonding, molecular structure and geometry, and properties of gases, will be taught. Students with no prior chemistry experience should strongly consider enrolling in CHEM 110 first. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: MATH 101 or math placement test. [L,N] (Fa,Sp,Su) 4 credits

CHEM 112: College Chemistry II

A continuation of the principles of chemistry, including intermolecular forces, properties of liquids and solids, physical properties of solutions, chemical kinetics, general chemical equilibria, acid-base theory and equilibria, solubility equilibria, electrochemistry, coordination compounds, and an introduction to organic chemistry. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: CHEM 111. [L,N] (Fa,Sp,Su) 4 credits

CHEM 201: Principles of Organic Chemistry

The principles of organic chemistry, emphasizing functional groups, molecular structure, nomenclature, and organic reactions; synthetic logic and basic methods of organic analysis will be included. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: CHEM 111. [L,N] (O) 4 credits

CHEM 211: Organic Chemistry I

A study of the structure, properties, reactions, and nomenclature of aliphatic hydrocarbons and their derivatives, including alkyl halides, alcohols and ethers. Emphasis will be given to mechanisms, stereochemistry, and synthetic considerations. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: CHEM 112. [L,N] (O) 4 credits

CHEM 212: Organic Chemistry II

A study of the structure, properties, reactions, and nomenclature of aromatic compounds, aldehydes and ketones, carboxylic acids and their derivatives, amines, addition and condensation polymers, and biochemical molecules. Additional topics will include the role and use of spectroscopy, reactions involving carbanions, and alpha-beta unsaturated compounds. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: CHEM 211. [L,N] (O) 4 credits

CHEM 270: Topics in Chemical Instrumentation

An introduction to the theory and operation of the various instruments commonly encountered in the fields of environmental and biotechnical analysis. The course will provide an introduction to the common laboratory and field instruments used to perform these types of separation and analysis and the use of computers for data acquisition and evaluation. Eight hours of class and laboratory per week. *This course is required for the Biotechnology Option and is offered at Middlesex Community College, Middletown, CT.* Prerequisites: CHEM 111 and CHEM 112, or CHEM 121[‡] and CHEM 122[‡], and permission of the instructor. 4 credits

[‡]Note: prerequisite courses CHEM 121, and 122 are offered at Middlesex Community College.

Clinical Laboratory Technology (formerly Medical Laboratory Technician)

These courses are open only to students in the Clinical Laboratory Technology Program or with permission of program coordinator.

MLT 142: Introduction to the Medical Laboratory

An introduction to basic skills and selected procedures used in the medical laboratory. Class/laboratory: 3 hours per week. (Fa) 2 credits

MLT 182: Clinical Microscopy I

Theory and procedures performed on urine and other body fluids, such as spinal fluid, synovial fluid and serous fluids. Class/laboratory: 3 hours per week. (Sp) 1 credit

MLT 201: Clinical Microbiology I

An introduction to the basic theories of clinical bacteriology and mycology, aseptic techniques for handling specimens and preparing media, primary specimen inoculation, subculturing, colony-count techniques, processing anaerobic and microaerophilic cultures, staining techniques, organism identification procedures and antibiotic susceptibility testing. (Fa) 4 credits

MLT 202: Clinical Microbiology II

Study of disease-causing microorganisms and the techniques performed for their isolation and identification. (Sp) 4 credits

MLT 211: Chemistry I

Theory and performance of chemical analyses on blood and other body fluids. (Fa) 4 credits

MLT 212: Chemistry II

The quantitative analysis of chemical components of blood serum, plasma and other body fluids, gravimetric, titrimetric, colorimetric, spectro-photometric and automated procedures. (Sp) 4 credits

MLT 221: Hematology I

Theories and concepts of the formation, physiology and pathology of blood. (Fa) 3 credits

MLT 222: Hematology II

Practical aspects and techniques used in the study of blood, including cell counts, staining techniques, differentiation of normal and abnormal cells, special tests, coagulation studies and automated procedures. (Sp) 3 credits

MLT 231: Immunology/Serology

Basic concepts of the antigen-antibody reaction and the immune system. The theory and performance of immunological techniques used in serodiagnostic testing. (Fa) 2 credits

MLT 251: Phlebotomy

The theory, skills and attitudes necessary to obtain blood by venipuncture and other skin puncture techniques from patients in hospitals and other health care settings. Open only to students in the Medical Laboratory Technician Program. (Fa) 2 credits

MLT 262: Immunohematology

An introduction to blood banking, with emphasis on proper techniques of blood collecting, grouping and typing procedures, compatibility testing and processing. (Sp) 3 credits

MLT 272: Parasitology/Mycology

The identification and processing of selected common specimens for parasitologic examination. Identification of common disease-causing yeasts and molds by macroscopic and microscopic examination. Class/laboratory: 3 hours per week. (Sp) 2 credits

MLT 282: Clinical Microscopy II

Practical aspects and analytical procedures performed on urine and other body fluids within the clinical lab. (Sp) 1 credit

Communication

COMM 150: Issues in Print, Broadcast and Photojournalism

An overview of law, ethics, and professional standards in media careers. Students must have access to a 35mm camera for photojournalism assignments. Class: 3 hours per week. (Sp) 3 credits

COMM 171/FA 171: Film Study and Appreciation

The viewing, discussion and analysis (written and oral) of representative films from the early years of the industry to the present will be taught. [H,L] (Fa,Sp,Su) 3 credits

COMM 176/FA 176: Video/Filmmaking

A creative workshop in which students will work in groups and make their own movies. Students work with video camcorders and editors. Students will learn scripting, shooting, editing and audio production techniques. (Fa,Sp) 3 credits

COMM 201: Public Relations I

A comprehensive survey of public relations principles and practices: fact-finding, planning and programming, action and communication, evaluation. This course covers relationships between organizations and their publics, and the effective use of media. Students will plan a complete public relations program. Class: 3 hours per week. Prerequisite: ENG 111. (Fa) 3 credits

COMM 206: Broadcast Announcing

The rudiments of broadcast announcing in a studio setting: clear speech, presence, projection and intimacy will be discussed. This course will cover radio announcing. Proper commercial/PSA preparation and broadcast delivery of the commercial/PSA are stressed through classroom and on-microphone exercises, including development, enunciation, pronunciation, interpretation, integration, and pacing. Students are critiqued on an individual basis, following the evaluation of laboratory projects. Class: 3 hours per week. (Fa) 3 credits

COMM 208: Mass Communication

This course is a survey of the American mass media and communication. Lectures and discussions will focus on the various print and electronic mass media industries, and the impact of mass communication on our society. The course is designed as an introductory course for those students who plan to major in Communication and for those who want to be informed about the development of the influence of modern mass media. Class: 3 hours per week. (Sp) 3 credits

COMM 210: Broadcast/TV Production

The fundamentals of television production are presented in this lab course in the College's TV studio. Scripting, camera set-ups, how to work with talent, and the control room side of TV production are topics that will be covered. Class: 4 hours per week. (Fa) 4 credits

COMM 211: Advanced Broadcast/TV Production

This course is designed to give students further training in broadcast/TV production. The course will focus on using electronic news gathering and electronic field production formats and integrating them into studio productions. Students will learn about field production, including lighting, audio and camera techniques. Students will gain more expertise in the editing process. Students, in the latter part of the semester, will produce weekly programs for local and public access. Class: 4 hours per week. (Sp) 4 credits

COMM 213/SPCH 213: Effective Speaking

This course is designed to encourage students to develop their speaking and listening skills in order to become more confident communicators. The course

introduced students to communication as an interactive process and emphasizes developing effective public presentation skills. Instruction stresses organization, research, writing, delivery and audience adaptation. Class: 3 hours per week. Prerequisite: eligibility for ENG 098. [H,L] (Fa,Sp,Su) 3 credits

COMM 218: Television Writing

Television Writing provides an overview of broadcast writing style. Students will develop skills in major areas such as news and feature writing, public affairs research and interviewing, and commercial script writing. In addition to the research/writing component students will have the opportunity to produce their work during in-studio newscasts and interviews and be involved in the production of a video commercial. Prerequisite: COMM 176/FA 176 or COMM 281. 3 credits

COMM 220/SPCH 220: Interpersonal Communication

The focus of this course is on the theory and process of communication in both professional and personal interpersonal relationships. The course examines the theoretical and practical application of communication as it relates to family, friends, work and intimate relationships. Prerequisite: ENG 111. [H,L] (O) 3 credits

COMM 222/SPCH 222: Gender and Communication

Gender and Communication is a course dealing with issues of language, speech and perception as they relate to gender. Students become familiar with the various theoretical approaches to gender and their implications for the study of communication. They explore how women and men approach same and opposite sex interactions and relationships in personal, social and professional contexts. Class: 3 hours per week. Prerequisite: ENG 111. [H,L] (O) 3 credits

COMM 251/FA 251: Computer Animation

Students will learn how to use the Macintosh computer to create animated presentations. The course will cover basic animation techniques as they apply to the digital environment as well as traditional skills such as storyboarding and script preparation. The software used will be Macromedia Director and Macromedia Flash. The class is limited to 20 students. Studio: 6 hours per week. Prerequisites: FA 210, FA 211 or COMM 290 or permission of instructor. [L] (Fa,Sp) 3 credits

COMM 252/FA 252: Advanced Computer Animation

This course is a continuation of COMM/FA 251 with an emphasis on multimedia design and interactivity. Students will work with Macromedia Director's Lingo scripting language and Flash's Actionscript to create interactive presentations. Advanced tips and tricks with this software are covered, as well as a discussion of design principles for multimedia development. Topics such as digital video and sound are also discussed. The class is limited to 20 students. Studio: 6 hours per week. Prerequisite: COMM 251/FA 251 or permission of instructor. [L] (Sp) 3 credits

COMM 270, COMM 271: Cooperative Education/Work Experience

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including TV, radio, and newspaper. Prerequisites: 12 completed credit hours in Media Associate program. (Fa,Sp,Su) 3 credits. *Please refer to page 19 for more information and general prerequisites for Cooperative Education/Work Experience.*

COMM 281: Basic Newswriting

This course covers news gathering and reporting within the context of news criteria. Interviewing, ethics and law are introduced. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of B or better. (Fa,Sp) 3 credits

COMM 282: Feature and Magazine Writing

This course covers: Types of features considered most in demand such as profile, travel, health and consumer issues. It also introduces students to the freelance market. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of B or better. (Sp) 3 credits

COMM 285: Television News Reporting

Students are exposed to the skills used by television reporters and videographers. Students produce weekly "news reports" on various campus and community events. Scripting as well as videocamcorder and editing equipment operation is covered. Class: 3 hours per week. Prerequisite: COMM 281, COMM 218 or COMM 176/FA 176. (Sp) 3 credits

COMM 290: Introduction to Desktop Publishing

In this course the student learns to use the Macintosh computer and Quark Software to create a variety of publications ranging from simple flyers to four page newsletters. (H) (FA, Sp) 3 credits

Computer Information Systems

CIS 102: Getting Acquainted with the Personal Computer

Students will explore basic windows features and apply the concepts using Microsoft Word. This hands-on course assumes no previous computer experience. (Fa) 1 credit

CIS 106: Windows

This course presents basic survival skills using the Windows operating system. The topics covered include: essential hardware and software concepts; using peripherals, using the Windows desktop; disk preparation; creating, editing, saving and printing files; creating and organizing folders; and exploring the Windows accessory programs. The course is taught in a hands-on environment and assumes no computer experience. Prerequisites: eligibility for MATH 101 and ENG 111. (Fa,Sp) 2 credits

CIS 111: Introduction to Computers

This transferable course is designed for the individual who wants to become computer literate and learn how to effectively use the Windows based microcomputer as a tool at home, on the job, or in the classroom. The student will be exposed to operating system concepts and application software through lecture and some hands-on experience. A research paper is a course requirement. *Please note: Students with no keyboarding experience should take BOT 100A concurrently.* Prerequisites: eligibility for MATH 101 and ENG 111. (Fa,Sp,Su) 3 credits

CIS 118: Presentation Software: PowerPoint

This course will demonstrate the use of presentation graphics programs and the characteristics of effective presentations. The course will give students practical experience with the PowerPoint program and its associated tools. Prerequisite: CIS 106 or CIS 111 or equivalent Windows experience. (Fa,Sp) 1 credit

CIS 159: Database Management: Access

This course in relational database management covers database concepts and terminology, and hands-on work with tables, queries, forms, and reports. Customization of the queries, forms, subforms, and reports is also included. Students will work with multiple tables and the design of databases. Prerequisites: CIS 106, or CIS 111. (Fa, Sp, Su) 3 credits.

CIS 166: Application Software: Excel

This course is designed to deliver the beginning, intermediate, and advanced capabilities of Microsoft Excel in a "hands-on" teaching environment. Topics

covered include basic spreadsheet concepts; workbook design and organization; formatting spreadsheet data; using formulas and functions; using data tables, data validation; creating and using charts; creating and using a worksheet database; integrating and downloading Web data to create dynamic and static spreadsheets, creating templates, and recording macros. Prerequisite: CIS 106. (Fa, Sp) 3 credits

CIS 246/GEO* 246: Introduction to Geographic Information Systems (GIS)
(formerly CIS 246/GEOG 246)

Students will learn the basic principles of Geographic Information Systems and explore and evaluate the various data models and structures used in the input management, analysis and output of geographic data. We will develop hands-on experience through use of a micro-computer based vector system (ArcView GIS), and examine how the nature and character of spatial data can be used in studies of natural and socio-economic environments. Class: 3 hours per week. Prerequisite: GEO* 101 or 111 and proficiency with the windows operating system. [B,L,S] (Sp) 3 credits

CIS 270: Cooperative Education/Work Experience

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study. For students in the computer information systems programs, this may include positions as system analysts, or staff specialists within a variety of settings. Prerequisites: 15 completed credit hours in the Computer Information Systems programs. (Fa,Sp) 3 credits. Please refer to page 19 for more information and general prerequisites for Cooperative Education/Work Experience.

Computer Science

CS 125: Programming Logic and Design with C++

An introductory course in fundamental programming concepts that are commonly encountered in problem solving using a computer. A structured approach to program logic and design is used. The course provides students with the skills needed to design the programming logic for microcomputer applications, microcomputer languages, and mainframe languages. The basic computer language used is C++, although the course emphasizes general programming theory and concepts common to all programming languages: algorithms, documentation, top-down structured program design and modularity, efficiency, testing and debugging, and user friendliness. Class: 3 hours per week. Prerequisite: eligibility for MATH 101 and ENG 111. (Fa,Sp,Su) 3 credits

CS 129: Algorithms in C

This course will cover algorithms and present reasons for understanding and using them. An in-depth treatment of sorting, searching and numerical methods will be covered prior to an analysis of compression and encryption techniques, and graph and geometric algorithms. Class: 3 hours per week. Prerequisites: CS 222 or CS 223 and CS 240 or permission of instructor. (Fa, odd years) 3 credits.

CS 201: Visual Basic I

This course will give the student practical experience with an event driven programming language. The emphasis of Visual Basic is on the objects included in the user interface and on the events that occur on these objects (i.e. clicking and scrolling). The development of good design and programming techniques is a major part of this course. Class: 3 hours per week. Prerequisite: CS 125 or previous programming experience. (Fa,Sp) 3 credits

CS 202: Visual Basic II

This course is a continuation of the Visual Basic experience started in CS 201. The emphasis will be on more complex programming tasks using

sequential and database files with bound and unbound forms. The ActiveX Data Object will be covered extensively. Also included will be topics on more complex arrays, menus, building class objects, building user-controls, SQL, Crystal Reports, and using common controls. This course will work with the object-oriented features of VB.Net and the .Net framework. Prerequisite: CS 201. (Fa, Sp) 3 credits

CS 213: Computer Programming COBOL I

This course is an introduction to structured COBOL programming. Students will analyze problems, design solutions, code, test and debug business-oriented programs. Prerequisites: CS 125 and CST 110. (Fa) 4 credits

CS 214: Computer Programming COBOL II

Advanced, structured COBOL programming techniques, including complex table handling, internal sorts, modular programming, various updating methods, PC screen manipulation, and VSAM coding will be taught. Prerequisite: CS 213. (Sp) 4 credits

CS 215: Microprocessor Assembly Language/

ELT 215: Microprocessors

This course is an introduction to the programming and interfacing of a microprocessor. Topics include assembly language programming, bus architecture, the datapath, addressing methods, memory systems, interrupts, analog to digital and digital to analog conversion, use of a Multifunction Multiprocessor Support Controller, data acquisition and process control systems. The course includes a microprocessor laboratory component. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: CS 125 or permission of the instructor; also recommended ELC 220. (Fa, even years) 4 credits

CS 216: Computer Organization and Architecture

This course is an introduction to the internal structure of the digital computer. Topics include: instruction sets, computer arithmetic, the datapath, pipelining, parallel processing, RISC (Reduced Instructions Set Computers), memory, addressing schemes, and embedded systems. Class: 3 hours per week. Prerequisite: CS 215 Microprocessor Assembly Language (may be taken concurrently) or permission of the instructor. (Sp, even years) 3 credits

CS 223: Programming in C++

This course introduces students to programming in the language C++, and solving problems with both numerical and non-numerical applications. It entails fundamental rules of syntax, expression and operators. Concept of data types, functions, control structures, arrays, pointers, strings, data abstraction with classes, objects, and operator overloading are discussed, followed by topics covering object-oriented programming. Sequential file processing and direct-access file processing is discussed. Students will design, write and execute modular programs on a PC. Class: 3 hours per week. Prerequisite: CS 125. (Fa,Sp) 3 credits

CS 224: Introduction to Java Programming

This course will introduce students to programming in Java. It will emphasize object-oriented design and development concepts, the Java event-delegation model, data structure classes and building applications with graphical (Swing) components. Students must have competence in another programming language, preferably C, prior to taking this course. Class: 3 hours per week. Prerequisite: CS 222 or CS 223 or CS 201 or permission of instructor. (Fa,Sp) 3 credits

CS 225: Systems Design

This course will cover analysis, design, and development of business application systems using a structured approach to the SDLC. Use and evaluation of modeling techniques and a CASE tool will be included along with information systems architecture, project management, and ethical issues. A team approach is used to complete a system development project. Microsoft

Project will be addressed as time allows. Prerequisites: CST 110, CS 125, and **one** of the following: CS 201, CS 223, CS 222, CS 213, CS 230 or permission of instructor. (Sp) 4 credits

CS 227: Advanced Java Programming

This course will cover advanced Java concepts including file i/o, the model-view-controller design pattern, Java Database Connectivity, Servlets and Java Server Pages. Students must have a sound knowledge of Java syntax, object-oriented concepts and graphical (Swing) components plus some exposure to HTML and SQL prior to taking this course. Class: 3 hours per week. Prerequisite: CS 224. (Sp) 3 credits

CS 228 Advanced Programming in C++

This course is a comprehensive treatment of the C++ Object Oriented language. Topics covered include a review of Classes and Data Abstraction, Operator Overloading, Inheritance and Virtual Functions and Polymorphism. New topics include C++ Stream Input/Output, Class Templates, Exception Handling, File Processing, Data Structures, Bit Manipulation, Preprocessor Directives, Stream Processing and C Legacy Code Topics. Prerequisite: CS 223 Programming in C++ (Fa, Sp) 3 credits

CS 230: Database Concepts and Applications with Oracle

This course is an introduction to application program development in a database environment with an emphasis on loading, modifying, and querying the database. The course will cover concepts, principles, issues, and techniques for the design, development and management of corporate data resources including: Three Schema Architecture, E-R Model, DML, DDL, QL, SQL, and Normalization Forms. Data warehousing, data mining and database administration will be emphasized. Design and development of a major group database project will be required. Prerequisites: CST 110 and CS 125 (Fa, Sp) 3 credits

CS 240: Data Structures

This course will cover data structures and present reasons for using them. A few topics in software engineering will be covered and used throughout the course. An introduction to the analysis of algorithms will be covered prior to an in-depth treatment of linked lists, stacks and queues, sets, hash tables, trees and tree traversal, heaps and priority queues, and graphs. Class: 3 hours per week. Prerequisites: CS 222 or CS 223 or permission of instructor. (Sp, odd years) 3 credits

CS 259: Database Management: Advanced Access with VBA

This course covers advanced concepts in personal computer database management. Lecture integrated with a hands-on approach helps students acquire knowledge and skills in effective information management, including concepts of private and public functions and subroutines, data access objects, OCX controls, and advanced queries. Students work with multiple joined tables and advanced report concepts, examine and utilize various control properties, and develop a standard user interface to the application they will create as part of the class. Microsoft Access Visual Basic for Applications will be the primary programming language used in the development of private and public functions and subroutines. Class: 3 hours per week. Prerequisites: CIS 159 and CS 201 or permission of the instructor. [B] (Fa) 3 credits

CS 299: Computer Forensics

This course provides a complete overview of computer forensics from its definition to "crime scene investigation", "seizure of data", determining the "fingerprints" of the crime, and tracking down the criminal. Crimes such as Web hacking and virus transmittal will also be examined. The course will focus on "solving the crime" rather than information security. Prerequisites: CST 110 or permission of the instructor. Class: 3 hours per week. (Sp) 3 credits

Computer Technology

CST 110: Introduction to Computer Technology

This course covers a computer's basic technical concepts. Hardware topics will include input output devices, storage media, processing units, memory, and telecommunications devices, and the interactions between them. Software is covered as it relates to the technology in both use and resource management. Current topics, including the Internet, multimedia, computer crime, security, ethics, and privacy issues will also be covered. Class: 3 hours per week. Prerequisite: CIS 111 or permission of the instructor. Students with strong computer skills should speak with a faculty advisor regarding the prerequisite. (Fa,Sp) 3 credits

CST 114: Exploring the Internet

This course includes the basic skills needed to become an informed Internet user. Major topics include: connecting to the Internet, accessing the Internet, e-mail management techniques, powerful tools for the Internet, browsing the World Wide Web, security issues, Internet communication and the dynamics of using Web search engines. Prerequisite: CIS 106. (Fa, Sp on-line) 2 credits

CST 115: Building Web Pages

JavaScript and web graphics are introduced to help students build navigable and dynamic web pages. Various stages of effective web page planning and design will also be explored. To complete course assignments, individuals can use the MCC laboratory computers or their home computer. Various browsers will be used for this class. Prerequisite: CST 114 or working knowledge of the Internet. (Fa, Sp, Su) 3 credits

CST 125: Help Desk Concepts

An introductory course in help desk concepts and career opportunities in the customer support field. Topics include the evolution of customer support, role of the help desk within a technical support unit, job responsibilities, help desk procedures, help desk tools and technologies, and help desk performance measures. Class: 3 hours per week. Prerequisite: eligibility for ENG 111 and MATH 101. (Fa,Sp) 3 credits

CST 130: Fundamentals of Computer Operating Systems

An introductory course in computer operating system concepts which are required for using and maintaining computer systems. Topics include: hardware management; disk, file and directory structures; installation and set-up; resource allocation, system optimization and configuration; system security; and utilities. Basic computer operating systems discussed are: DOS; Windows 95; Windows and UNIX. Upon course completion, students will be able to install and configure a basic operating system and maintain and optimize computer system performance. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: CST 110. (Fa,Sp) 4 credits

CST 225: Troubleshooting Microsoft Office Products

This course will cover some of the common application software problems encountered in customer support positions. Students will deal with simulated technical problems associated with installations and upgrades to application programs. They will work with frequently asked questions and common problems relating to the Microsoft Office Suite. This class will meet for 4 hours each week. Class: 4 hours per week. Prerequisite: CST 125, CIS 166, CIS 159 or permission of the instructor. (Fa) 4 credits

CST 226: Practicum in Help Desk Support

This course is a continuation of CST 292 and CST 225. The tools and technologies associated with Help Desk support will be explored with practice in a simulated Help Desk setting. Solving real problems, determining the level of assistance that is needed, and practicing good customer support skills will be an integral part of this class. The students will also deal with "people" problems such as irate customers, demanding customers, and customers who are not up to speed technically. Practical experience will be obtained as

students will be required to participate in a Help Desk practicum either at MCC or at an alternative approved site. Class: 2 hours per week. Laboratory: 3 hours per week in Help Desk practicum. Prerequisite: CST 192 or CST 292 and CST 225. (Sp) 3 credits

CST 231: Computer Operating Systems - Windows Workstation

This course introduces operating system concepts for the Windows Workstation operating system. Topics include: hardware management, file and memory management, system configuration/optimization, networking options, and utilities. Upon completion of the course, students will be able to perform operating systems functions at the single/multi-user level in a Windows environment. The course includes a laboratory component. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: CST 130 or permission of instructor. (Fa) 4 credits

CST 232: Computer Operating Systems - Windows Server

This course is a continuation of CST 231: Computer Operating Systems—Windows Workstation — at the Windows Server network level. The course includes a laboratory component. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: CST 130. (Sp) 4 credits

CST 233: Computer Network Management

This course covers the fundamentals of network administration and system management. Topics include: assessing and configuring basic network services, managing directory services, and using network management software. Upon completion of the course, students will be able to apply system administration skills in developing network management strategies. Class: 3 hours per week. Prerequisite: CST 171 or CST 271 (Fa) 3 credits

CST 245/MM 245: Web Page Design

Students will learn the fundamentals of designing, planning and producing web sites and pages for posting on the Internet. Image management and creation, information design, and animation creation and use are major topics. Emphasis will be on site design and management. Students will work with HTML code and a web page editor. Class: 6 hours per week. Prerequisites: FA 210, COMM 290 or permission of the instructor. (Fa,Sp) 3 credits

CST 271: Network Theory and Application

(replaces CST 171)

This course will cover introductory network theories and applications. Various basic topics on design, implementation, administration and troubleshooting of Local Area Networks (LANs) and Wide Area Networks (WANs) will be explored. The types of network components such as software, hardware, media, topologies, protocols and standards (OSI model) will be covered from a networking technician's point of view. Examples of network operating systems will be surveyed (i.e. Novell, Unix & Windows). Students will develop critical thinking and troubleshooting skills through setting-up and administering a basic Windows network in a "hands-on" setting. This course will begin preparing the student for the CompTIA Network + certification. Prerequisite: CST 110 or permission of the instructor. (Fa, Sp) 4 credits

CST 272: Networking Infrastructure and Implementation

(replaces CST 172)

This course will cover advanced network infrastructure concepts. Advanced topics in network design, protocols, upgrading, security, troubleshooting and administration will be covered. This course will emphasize preparing the student for the Microsoft 70-216 - Implementing and Administering a Microsoft Windows 2000 Network Infrastructure certification exam for the MCSA certification track. Students will source select, price and plan a complex network design as a project while implementing various other types of advanced networking concepts in a "hands-on" setting. Prerequisite: CST 271 (Sp) 4 credits

CST 281: Network Security Fundamentals

This is the first in a series of Network Security courses that provide the student with the fundamental concepts of this important information technology. Course objectives include security models, architecture and layers while exploring the depths of access control, authentication, attacks, infrastructure devices, intrusion detection, and basics of cryptography. Also covered will be the policies and procedures of operational/organizational physical security and disaster recovery. Students will develop critical thinking and troubleshooting skills through mastering these security concepts in a "hands-on" setting. This course will emphasize preparing the student for the CompTIA Security + certification. Class: 3 hours per week. Prerequisite: CST 271 (Fa) 3 credits

CST 291: Computer Hardware Maintenance

(replaces CST 191)

This course will cover the principles of maintaining and troubleshooting the personal computer's hardware. The course will cover computer hardware, associated peripherals, configuration, optimization, and repair from the PC technician's point of view. Students will develop critical thinking and troubleshooting skills through an emphasis on hands-on experience in installing, maintaining, and processing various problems with computer hardware. This course will begin preparing the student for the CompTIA Core Hardware Examination for the A+ certification. Prerequisite: CST 110 or permission of the instructor. (Fa, Sp) 4 credits

CST 292: System Software Maintenance

(replaces CST 192)

This course will cover the principles of maintaining the personal computer's operating systems software. The course will cover installing, configuring, upgrading, diagnosing and troubleshooting computer operating system software from the PC technician's point of view. Students will develop critical thinking and troubleshooting skills through an emphasis on hands-on experience in installing, maintaining, and processing various problems with computer desktop operating system software. This course will begin preparing the student for the CompTIA Operating System Technologies Examination for the A+ certification. Prerequisite: CST 291: Computer Hardware Maintenance (Fa, Sp) 4 credits

CST 293: Server Hardware Maintenance

This advanced course will cover the principles of determining, installing and maintaining information technology enterprise server hardware. The course will cover server installation, configuration, upgrading, proactive maintenance, troubleshooting, equipment environment issues, and disaster recovery from an enterprise equipment technician's point of view. Students will develop critical thinking and troubleshooting skills through an emphasis on hands-on experience in installing, maintaining, and processing various problems with server hardware. This course will emphasize preparing the student for the CompTIA Server+ certification. Class: 4 hours per week. Prerequisite: CST 291 or permission of the instructor. (Fa) 4 credits

Criminal Justice

CJ 102: Criminal Justice Field Experience

This course is one hundred twenty hours of supervised field experience in a cooperating social service agency. Class: 1 hour, weekly pro-seminar. Prerequisites: CJ 111 and the consent of the program coordinator. (O) 3 credits

CJ 104: Computer Forensics

This course provides a complete overview of computer forensics from its definition to crime scene investigation. Included in the discussions are the topics of seizure of data, determining the "fingerprints" of the crime, and tracking down the criminal. Crimes such as Web Hacking and Virus transmittal will also be examined. The course will focus on solving the crime rather than information security. (O) 3 credits

CJ 110: The Police Role in the Community

This course covers the study, analysis and recommendations for reducing the severity of the major tension points between police and the community. Emphasis is given to the practical application of scientific knowledge and methodology to police-community relations in the State of Connecticut. (Fa,Sp) 3 credits

CJ 111: Introduction to Criminal Justice

This course is a descriptive-analytical survey of crime and criminal justice in the United States today, that explores strategies for change involving all levels of government, private groups and every American citizen. Class: 3 hours per week. [S] (Fa,Sp) 3 credits

CJ 112: Police Patrol Procedures

The history and growth of traffic problems and the development of specialized traffic control methods. Class: 3 hours per week. (Sp) 3 credits

CJ 114: Introduction to Corrections

An introduction to the correctional system in the United States and other allied countries. Emphasis will be placed on the role of corrections in our society and criminal justice system as a whole. [S] (Fa,Sp) 3 credits

CJ 122: Police Administration

This course is an introduction to police organization, administration, personnel, public relations, crime prevention and theory. Class: 3 hours per week. (Sp) 3 credits

CJ 123: Forensic Photography

Forensic Photography is designed in two parts. The first section of the course is designed to increase the student's artistic and technical capacity in the area of photography. The second section of the course is designed to apply the students technical photographic abilities to law enforcement applications. Students will study and practice approaches and techniques in photographing traffic accidents, crime scenes, and physical evidence. (O) 3 credits

CJ 131: Safety and Fire Protection Management

The management of safety and fire prevention services and accident prevention programs will be covered. Class: 3 hours per week. (O) 3 credits

CJ 133: Security Administration

The principles of organization, management, budgeting, personnel, records and public relations of a security agency will be covered. Class: 3 hours per week. (O) 3 credits

CJ 135: Introduction to Security Methods

A review and study of the organizations that require security, such as retail operations, medical institutions, educational institutions, financial operations and others, and of the legal and economic aspects that must be considered in security operations. Class: 3 hours per week. (O) 3 credits

CJ 136: Introduction to Security Methods II

A concise study of the procedures and operations that affect security and guarantee the rights of those involved in any security system. Class: 3 hours per week. (O) 3 credits

CJ 140: Motor Vehicle Stops and Safe Extrication

The academic aspect of this course will provide an in-depth look and discussion of Connecticut motor vehicle laws. The practical aspect of the course will concentrate on suggested police procedures for the stopping and extrication of individuals from their vehicles. Several practicals will focus on the safe extrication of felony suspects as well as investigation of the suspected DWI offender. (O) 1 credit

CJ 141: Gangs and "Families": Past, Present and Future

The course will provide the student with an overview of the psychology and sociology behind various gangs around the country. In depth coverage will be given to local gangs' symbolism including their graffiti, styles, tattoo, patches and other markings. Additionally, this course will cover assorted proactive strategies for the police and the community in their attempt to control gang violence/crime. (O) 1 credit

CJ 142: Identifying and Coping with Domestic Violence & Child Abuse

Instruction will encompass a history of domestic violence, its causes, social impact and the impact on other family members. The recent changes in the area of law enforcement and its response to domestic situations will also be addressed. The seminar will culminate with a decision making workshop focusing on the arrest/non-arrest dilemma. (O) 1 credit

CJ 143: Survey of Drugs of Abuse

The course will consist of an overview of drugs of abuse with regards to identification, effects on the body, mind and behavior. Class will include didactic presentation, video presentation discussion and interactive class presentations. (O) 1 credit

CJ 144: Community Policing Techniques

This course will help to identify the social science, theoretical and historical roots of community policing and will clarify the concept in both organizational and philosophical terms. Research relative to the successes and failures of community policing will be studied as well as various programs that fall under the community policing rubric. (O) 1 credit

CJ 145: Management and Preservation of the Crime Scene

This course will concentrate on collection of specific physical evidence at various crime scenes. Collection techniques will encompass crime scene photography, note taking, crime scene sketching, evidentiary search methodology and chemical/powder latent fingerprint collection and preservation. Constitutional considerations relative to the collection of said physical evidence as well as testimonial evidence from witnesses, victims and suspects is included. (O) 1 credit

CJ 151: Profiles of the Violent Offender

This course introduces the student to the fundamental principles of violence in American society, namely the nature, existence and causation of violent crime, and the problems and procedures involved in the investigation and apprehension of violent criminals. (O) 1 credit

CJ 152: Traumatic Incident Stress Management

The focus of this seminar is the identification, origin and management of personal stress as it relates to public service fields. These sessions will draw upon the day-to-day life experiences and coping mechanisms of individuals working in law enforcement and other public service fields. (O) 1 credit

CJ 153: Serial Sex Offenders

This course will provide an in-depth look at the psychology, sociology and characteristics of the habitual sex offender. In-depth coverage will be given to the modus operandi of these offenders as well as a discussion concerning the profile of individuals who become their victims. (O) 1 credit

CJ 155: Hostile Situation Management

This seminar will focus on the controversy surrounding the management of crisis/hostile situations. The course will deal with the crucial questions of when, where and how force should be used in dealing with the public. (O) 1 credit

CJ 156: Advanced Studies in Gangs and Cults

The course will provide the student with an overview of the psychology and sociology behind various gangs around the country. In this advanced course

the student will be exposed to West Coast gangs' symbolism including their graffiti, styles, tattoo(s), patches and other markings. Additionally this course will cover assorted cult groups identified throughout the country and some of the proactive strategies police and family members use to extricate individuals caught up in cults. (O) 1 credit

CJ 157: Interviewing and Interrogation

This course will present the determination of when interviewing or interrogation should be used. The use of interviewing methods including the how, what and why of each will be discussed. (O) 1 credit

CJ 160: The Death Penalty

This course will introduce students to the death penalty laws of the State of Connecticut, other states, and other countries. This will be accomplished through lecture, group discussion, reading material, video presentation and an expert guest lecturer. There will also be an in-depth discussion concerning present day death penalty cases. (O) 1 credit

CJ 161: Crime, Criminals and the Media

In this one credit course, the student will look at various aspects of the effect of the media in the criminal realm. This course will also explore the historical events that have led to the contemporary relationship that now exists between the police and the media. (O) 1 credit

CJ 162: Test Preparation for Police Candidates

The goals and objectives of this two-day program are to prepare the student to successfully pass the written and oral board phases of police testing. In addition the student will learn about orientation and the human resource component of law enforcement provisions. (O) 1 credit

CJ 201: Institutional Treatment of the Offender

Introduction to the principles and practices of placing and treating adult and juvenile offenders in different institutions. Class: 3 hours per week. Prerequisite: CJ 111. (O) 3 credits

CJ 202: Community Correction

This course introduces students to historical, theoretical and judicial processes in the development of community correctional programs, with emphasis on juvenile delinquency programs at the police and judicial level (probation, parole, drug, alcohol and self-help programs). Class: 3 hours per week. Prerequisites: CJ 111 and 201. (O) 3 credits

CJ 203: Corrections Administration

This course introduces students to the specifics of corrections organization, systems, administration, personnel, public relations, programs, planning and budgeting, and governmental and executive control. Class: 3 hours per week. Prerequisite: CJ 111. (O) 3 credits

CJ 211: Criminal Law I

Students will study the elements of crime, especially the intent and the act, and a survey of the common law felonies and misdemeanors that make up the body of criminal law. Class: 3 hours per week. (Fa) 3 credits

CJ 212: Criminal Law II

A study of the act(s) which make up the elements of a crime. The analysis of these criminal elements will allow an in-depth understanding and exploration into a wide spectrum of modern day criminal law and effective legal reinforcement. Class: 3 hours per week. Prerequisite: CJ 211. (Sp) 3 credits

CJ 221: Criminal Investigation

Methods and procedures of investigation in misdemeanors and felonies will be taught. Class: 3 hours per week. Prerequisite: CJ 111. (Fa) 3 credits

CJ 222: Evidence and Court Procedure

The rules of evidence, with emphasis on the hearsay rule, the exceptions to the rule, best evidence rule, documents, corpus delicti, opinion evidence, circumstantial evidence, privileged communications, wiretapping, confessions, search and seizures, will be covered. Class: 3 hours per week. (Sp) 3 credits

CJ 225/LEGL 225: Trial Techniques

Provides in-depth involvement, academically as well as practically, in various aspects of courtroom experience. The rules of evidence are examined through the study of various legal problems. Ability to analyze facts and legal issues and to develop logical legal arguments is emphasized. Concentration is given to proper courtroom demeanor and advocacy skills. [B] (Fa) 3 credits.

CJ 226/LEGL 226: Mock Trial Practicum

Provides in-depth involvement, academically as well as practically, in various aspects of the courtroom experience. Selected students become role players in a national competition involving a mock scenario. Selected students are supplied a complex legal problem. Fact analysis and development of logical legal arguments are undertaken, and students prepare and present both sides of a case, competing against other colleges. Analytical and communication skills are developed in following courtroom procedure. Prerequisite: Students must try out during the previous semester and be selected for the American Mock Trial Association team. Not available to students who have received a Bachelor's degree. [B] (Sp) 3 credits.

CJ 227: Advanced Trial Presentation

Students in this advanced trial techniques and litigation class will further develop and perfect their skills in the presentation of a legal case in front of a courtroom (judge or jury). The student will learn to go beyond the basic aspects of courtroom rules and procedures and will develop a theme of how a case should be presented differently at different times and in front of different audiences. This class is set forth to fine tune the litigation skills of the prospective law student in a legal debate atmosphere. Furthermore, this course will perfect the technique and ability of the student to research, analyze and use legal case law and evidence to their fullest capacity in order to present the most effective and persuasive case possible in a court of law. Class: 3 hours per week. (Sp) 3 credits.

CJ 230: Introduction to Forensic Science

Forensic science is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. The study of physical evidence encompasses any and all objects that can establish that a crime has been committed or can provide a link between a crime and its victim or a crime and its perpetrator. This course will be devoted to the discussion of methods and techniques available to law enforcement personnel and forensic scientists for the evaluation of physical evidence. Class: 3 hours per week. (F) 3 credits.

CJ 231: Advanced Forensic Science

This course will be devoted to advanced topics within the area of forensic science. The physical evidence at a crime scene provides investigators with valuable information linking the suspect to the crime scene, to the victim and to a weapon. This course will discuss advanced methods of crime scene reconstruction and hands-on application of crime scene techniques available to law enforcement personnel and forensic scientists for evaluation of physical evidence. Some travel will be required. Class: 3 hours per week. (O) 3 credits

CJ 232/PSYC 232: Social Psychology of Criminal Behavior

This course will provide an overview on the psychological understanding of crime and the criminal. It will provide an analysis of individual differences in various criminal activities with a focus on a conceptual and practical understanding of the predictors of individual behavior. Class: 3 hours per week. (O) 3 credits

CJ 297: Policing for the 21st Century

Policing for the 21st Century is a dynamic course meant to help students think about alternative policing methods. There will be an emphasis on non-traditional practices, organizational methods and policies. Students will examine how to make police systems more effective and how to improve service to communities in a rapidly changing society. Class 3 hours per week. (O) 3 credits

CJ 299: Sentencing Alternatives for the 21st Century

This course will explore alternative sentencing options within the criminal justice system. It will focus on Connecticut alternatives in comparison to other states. Students will learn about probation, alternative incarceration center, and various court diversionary programs. (O) 1 credit

Deaf Studies**DS 111: Deaf Studies I: Introduction to the Deaf Community**

This introductory course examines various aspects of the deaf community. It addresses culture, controversies, activities and events in the deaf community. In addition, the course explores the hearing mechanism, hearing disorders and the role of audiological assessment in the deaf community. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits

Drug/Alcohol Rehabilitation Counselor**DARC 101: Introduction to Issues in Drug/Alcohol Abuse**

This course covers key issues of the alcohol and drug abuse treatment field from the standpoint of the unique sociological and public health aspects involved. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [S] (Fa) 3 credits

DARC 111: Introduction to Counseling

Theory and skills of therapeutic counseling will be taught. Discussion of relevant theory as well as development of such skills as attending behavior, reflection of feelings, direct mutual communication and interpretation will be covered. The focus of this course is issues in substance abuse. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [S] (Fa) 3 credits

DARC 112: Group Therapy and Techniques

The emphasis of this course is on understanding the theory of group dynamics. An organized overview will be presented of the different modalities within the generic term "group counseling" and of the various guidelines for the appropriate use of these modalities with different client populations. The focus of this course is issues in substance abuse. Class: 3 hours per week. [S] (Sp) 3 credits

DARC 117: Introduction to Alcohol and Drug Prevention Education

Students will be introduced to a comprehensive overview of prevention. The course will focus upon the role models of prevention, prevention theory, practical application of theory and program planning. The five core functions of a prevention professional, ethics, cultural competency and prevention opportunities for treatment professionals. Class: 3 hours per week. (O) 3 credits

DARC 158: Biology of Drug/Alcohol Abuse

The study of drug abuse in current times, including the pharmacology and pathology of chronic drug abuse with respect to the individual as well as society and the law, will be covered. Class: 3 hours per week. (Sp) 3 credits

DARC 213: Advanced Counseling

The course will provide students with an in-depth study of individual and group counseling theory and an opportunity to synthesize theory with practical application. Prerequisite: DARC 111. Class: 3 hours per week. (Sp) 3 credits

DARC 214: Psychotherapy and Spirituality

This course will explore practical methods of integrating spirituality into the process of psychotherapy. Designed for counseling students, with particular emphasis on drug and alcohol rehabilitation counseling, this course will contrast both spirituality vs. religion and pastoral counseling vs. spiritual counseling. Students will explore ways in which traditional counseling theories lend themselves to the discussion of a personal spirituality, and practice traditional counseling techniques in integrating spirituality into the process of psychotherapy. (O) 3 credits

DARC 251: Counseling Internship I

Prospective drug and alcohol counselors are expected to demonstrate their counseling skills for a minimum of 15 hours per week in a clinical setting under the joint supervision of the College and qualified clinical personnel of the treatment agency. *Open only to students formally accepted into the DARC Program.* Class: 2 hours per week plus 15 hours of field placement per week. Prerequisites: DARC 101, 111, 112; BIO 158. (Fa) 6 credits

DARC 252: Counseling Internship II

This course is a continuation of DARC 251. *Open only to students formally accepted into the DARC Program.* Class: 2 hours per week plus 15 hours of field placement per week. Prerequisite: DARC 251. (Fa) 6 credits

DARC 253: CCB Exam/Certification Preparation

Designed for counseling students in the Drug & Alcohol Rehabilitation Counselor Program (DARC), this course will review the process of certification by the Connecticut Certification Board. Lesson units will include an overview of the competencies necessary to pass the written exam, Global Criteria, the Case Presentation and Oral Exam, and the application process. Class 1 hour per week. (O) 1 credit

Earth Science**ERSC 110: Introduction to Earth Science**

This course is an introductory survey of selected topics in geology, oceanography, astronomy, and meteorology. Earthquakes, moon probes, sea explorations, plate tectonics, and severe weather are among the topics treated in depth. The course may be supplemented with field trips. Class: 3 hours per week. [L,N] (Fa,Sp,Su) 3 credits

Economics**ECON 101: Macroeconomics**

This course covers determinants of the level of national economic activity, employment and prices, fiscal and monetary policy, international economics, and payment mechanisms. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits

ECON 102: Microeconomics

Demand and supply, principles of the market mechanisms, pricing and output determination under competitive and noncompetitive market behavior, factor productivity, prices and international economics will be taught. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

ECON 211/BUS 211: Money and Banking

This course deals with the role and supply of money, the Federal Reserve system, the principles of banking, and the structure of financial institutions. Monetary policy and its application are emphasized. Class: 3 hours per week. Prerequisite: ECON 101. [L,S] (O) 3 credits

ECON 212: International Economics

This course presents the principles of international trade and finance, theory of comparative advantage, exchange rates, monetary standards, international

financial institutions, and the history of national policies affecting trade. Students will learn both the principles of international trade and many applications. Prerequisite: ECON 102. [L,S] (O) 3 credits

Education

ED 111: Introduction to Early Childhood Education

This course is designed to acquaint students with the field of early childhood education. Foundations of early childhood education, the content of the curriculum and significant aspects of child growth and development will be discussed. Class: 3 hours per week. (Fa,Sp) 3 credits

ED 117: Observation & Assessment of the Early Childhood Program

The course will focus on the role of the learning environment and teacher/child interaction in the early childhood program. Students will visit programs and use observation forms to assess the quality of early childhood experience for the young child. Six 4-hour observation visits are required. Class: 3 hours per week and the required program visits. Prerequisite: ED 111. (Sp) 4 credits

ED 118/ENG 118: Children's Literature

This course offers an overview of children's literature including its history, genres, and leading authors and illustrators. It covers selection and critical study of books for children, including folklore, poetry, fiction and nonfiction. Issues related to children's literature and literature extension activities will also be explored. Class: 3 hours per week. Prerequisite: ENG 111. [H] (Fa,Sp) 3 credits

ED 123: Language and Literacy

This course is an introduction to the language and literacy development of children from birth through age eight. It explores ways that adults can promote growth in the areas of reading, writing, listening and speaking. Class: 3 hours per week Prerequisite: eligibility for ENG 111. (Fa) 3 credits

ED 200: Field Experience

Students take 150 hours of training in a cooperating institution where they assume responsibilities appropriate to their previous background and experience. Attendance is required at seminars and group evaluation sessions. Prerequisite: 30 credit hours of approved course work. Note: students must teach at least 10 hours per week in a nationally accredited early childhood program. (Sp) 3 credits

ED 210: Administration & Supervision of Early Childcare Programs

This course will focus on administering Early Childhood Programs. It will examine the program's framework, operation, and implementation for both center-based and family home child care settings. Class: 3 hours per week. (O) 3 credits

ED 211: The Early Childhood Curriculum

The study of the role of the teacher as she/he plans, implements, and evaluates a curriculum that focuses on the design of the learning environment; the interaction between teacher, child, and family; and the development of activities that foster children's social, emotional, physical, and intellectual development. Class: 3 hours per week. (Sp) 3 credits

ED 212: Creative Activities for the Early Childhood Program

This course examines the role of music, movement, art, language and literacy, dramatic play, blocks, table toys, sand and water in the curriculum. The relationship of creative activities to the total educational program of the young child is explored. Students create and present developmentally appropriate activities. Class: 3 hours per week. (Fa) 3 credits

ED 217: Advanced Early Childhood Curriculum

This course focuses on the teaching strategies necessary to design and implement a high quality early childhood program and will address topics of

previous curriculum courses in greater depth. Study topics will include observation and planning for individual and groups of children, working with families, and ethics. Class: 3 hours per week. (Sp) 3 credits

ED 237: Science, Nature and the Environment

This course will focus on the teacher's role in supporting and expanding young children's interests in science, nature and the environment. Students will both share and explore ideas, materials and activities both indoors and outdoors. Topics will include the importance of sand and water play, fostering observation skills and encouraging trial and error experiences. Identifying quality science literature for young children will also be addressed. Class: 3 hours per week. Prerequisite: ED 111. (Sp) 3 credits

Electronics

ELC 120: AC/DC Circuit Analysis

An introductory course in DC and AC circuit fundamentals with emphasis on circuit analysis, measurements, and test equipment operation. Topics include: DC/AC circuit principles, circuit analysis laws and theorems, components, test equipment fundamentals, circuit simulation software, and other related topics. Upon completion of the course, students will be able to interpret circuit schematics, design, construct, verify, and analyze DC/AC circuits and use electrical test equipment. The course includes a laboratory component. Class: 3 hours per week. Laboratory: 2 hours per week. Co-requisite: MATH 115. 4 credits

ELC 122: Electronics

The course includes semiconductor -based devices such as diodes, bipolar transistors, FET's, thyristors, and related electronic components. Emphasis is placed on analysis, selection, biasing, and applications in power supplies, small signal amplifiers, and switching and control circuits. Upon completion of the course, students will be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment. The course includes a laboratory component. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: ELC 120. 4 credits

ELC 220: Digital Electronics

This course covers combinational and sequential logic circuits. Topics include: number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion of the course, students will be able to construct, verify, and troubleshoot digital circuits using appropriate techniques and test equipment. The course includes a laboratory component. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: ELC 120, MATH 115. 4 credits

ELT 111: Circuit Analysis I

An introductory course in electric circuit analysis. Mathematical techniques for analyzing and predicting the behavior of passive circuits excited from DC sources are emphasized. Topics include: the properties of resistance, capacitance and inductance; series, parallel and complex circuits, voltage sources and current sources; the maximum power transfer theorem; Kirchoff's current and voltage laws, Norton's and Thevenin's theorems, Maxwell's mesh analysis and Superposition theorem; and the transient response of RC and RL circuits. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: MATH 102, math placement test or two years of high school algebra. (Fa) 4 credits

ELT 112: Circuit Analysis II

Students will study the basic principles that govern the behavior of passive circuits excited from sinusoidal voltage and current sources. Topics include: reactance, impedance and admittance, the application of network theorems to AC circuits; single-phase and poly-phase circuit analysis; power and power factor correction;

mutual induction, transformers and resonance. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: ELT 111. (Sp) 4 credits

ELT 113: Electrical Power Systems

This course covers the basic principles and major components used in energy conversion systems. Topics include: DC motor/generators, AC motor generators, AC squirrel cage induction motors and transformers and their control systems. Class: 3 hours per week. Prerequisites: PHYS 122, ELT 111. (Fa) 3 credits

ELT 201: Electronics I

A basic course beginning with a study of the physics of semiconductor devices and the DC and AC operation of solid state devices in active circuits. Devices studied include: diodes, zener diodes, bipolar and field effect transistors, and operational amplifiers. Emphasis is placed on the analysis and design of biasing networks and the small signal operating properties of discrete device amplifiers. Device characteristic curves and properties are developed for each of the devices above. Computer-aided circuit simulation and analysis techniques are introduced for solving active electronic circuits. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: ELT 111, MATH 191. (Fa) 4 credits

ELT 202: Electronics II

This course is a continuation of ELT 201. Topics include: multistage amplifiers, multiple device circuit configuration, large signal amplifiers, active filters, regulated power supplies, oscillators, the Bode plot, Nyquist plots, frequency response, feedback and stability. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: ELT 201, ELT 112, MATH 191. (Sp) 4 credits

ELT 213: Controls Electronics

This course introduces students to electronic controls systems. Topics include: complex algebra, phasors, impedance, transfer functions, open and closed loop systems and sequential control including pneumatic and relay logic. Students will study pneumatic control elements, ladder diagrams, interfacing techniques, stepper motor controls and servo motor controls, the use of microcomputer controls in industrial applications such as robotics, application of data conversion electronics and the applications of program controllers. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: ELT 201, MATH 191. (Fa) 4 credits

ELT 215: Microprocessors

This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include: assembly language programming, bus architecture, bus cycle types, I/O systems, memory systems, interrupts, and other related topics. Upon completion of the course, students will be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment. This course includes a laboratory component. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: ELC 220. 4 credits

Engineering

Technical Education 101: Introduction to Engineering & Technology

An introduction to engineering and technology fields with special emphasis on the programs of Engineering Science; Manufacturing Engineering Science; Industrial Engineering Technology; Electronics Technology; Quality Assurance Technology; Tool, Die, and Gage Maker Technology; and Machine Tool Service Technology. The course will include an introduction to the history and development of technology, career choices in the fields of engineering and technology, professional responsibilities in the chosen career fields, study skills, use of the technical library and publications, and information about specific technical programs at MCC. Class 1 hours per week. (Fa,Sp) 1 credit

ENGR 101: Engineering Drawing Interpretation

An introduction to the interpretation of engineering drawings beginning with the basics of orthographic projection. Topics include: working drawings, lines, linear and angular dimensioning, sectional views, tolerances and allowances, thread representation, arrowless and tabular dimensioning, steel specifications, auxiliary views, point-to-point and datum dimensioning conforming to ANSI Y14.5M and ISO standards. Class 3 hours per week. (Fa) 3 credits

ENGR 102: Geometric Dimensioning and Tolerancing

An intermediate course in the interpretation of engineering drawing beginning with the basics of dimensional tolerances and tolerance systems. Topics include: the mathematics of interpreting and specifying tolerances on dimensions, the system of geometric tolerancing, the basic nomenclature and standard symbols conforming to ANSI Y14.5M. Class: 3 hours per week. Prerequisite: ENGR 101. (Sp) 3 credits

ENGR 111: Introduction to Engineering

Students will be introduced to the fields of engineering through design and graphics and comprehensive engineering projects. Topics include: sketching, charts, graphs, forces, energy, electrical circuits, mechanisms, robotics, manufacturing technologies, and fundamentals of engineering economics. Class: 3 hours per week. Prerequisite: MATH 102 or a satisfactory score on math placement test. (Fa,Sp) 3 credits

ENGR 121: Mechanics

A basic course in the fundamentals of classical mechanics. Topics include: vectors, kinematics, translational and rotational equilibrium, torque, Newton's laws of motion, gravitation, work, power, energy, impulse, momentum, rotary motion and elasticity. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: MATH 116. (Fa) 4 credits

ENGR 122: Electricity/Electronics I

A basic course in electricity and electronics for students who are not electronics majors. Topics include: DC circuits, AC circuits, basic magnetics, fundamentals of electrical machinery and basic electronics. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: MATH 116. (Fa) 4 credits

ENGR 123: Electricity/Electronics II

An intermediate class in electricity and electronics for students preparing for careers in manufacturing machine tool service. Topics include: basic principles and major components (DC motor/generators, AC motor/generators, etc.) used in energy conversion, analog and digital circuits, and machine control systems, circuits and components. Class: 3 hours per week. Lab: 2 hours per week. Prerequisite: ENGR 122. (Sp) 4 credits

ENGR 211: Engineering Statics

Students will be introduced to engineering mechanics via vector approach to static forces and their resolution. Topics include: properties of force systems, free-body analysis, first and second moments of areas and mass, and static friction. Applications to trusses, frames, beams and cables included. Class: 3 hours per week. Prerequisite: MATH 192 (which may be taken concurrently). (Fa) 3 credits

ENGR 212: Engineering Dynamics

Engineering applications of Newtonian mechanics to dynamic forces, translational motion, work, impulse and momentum will be taught. Topics included: kinematics, kinetics of particles and rigid bodies, vibrations, energy and momentum conservation. Class: 3 hours per week. Prerequisites: ENGR 211 and MATH 192. (Sp) 3 credits

ENGR 221: Introduction to Electric Circuit Analysis

Linear electric circuit analysis using Ohm's and Kirchhoff's laws: includes loop and nodal analysis; transients in electric circuits; behavior of operational amplifiers

and nonlinear devices; design, operation and use of electric instruments; basic meter movements; and simple filter circuits. TI-85 graphing calculator required. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: PHYS 132 and MATH 192. Corequisite: MATH 201. (Sp) 4 credits

English

ENG 093: Preparatory College Reading and Writing I

This course is designed for students who need a semester of reading and writing experiences before continuing on to ENG 096. This course will engage students in reading and writing activities with an emphasis on whole class and small group discussion. Note: A grade of "C" or better is required to take ENG 096. Placement via assessment test. Class: 3 hours per week. (Fa,Sp) no credit

ENG 097: Preparatory College Reading and Writing II

This course focuses on reading and writing as processes. Students will interact with various types of texts through reading, writing, listening and speaking. They will have the opportunity to create meaningful pieces for real purposes and real audiences. This course will prepare students to understand, interpret, and respond to course content at the college level. As a result of this course, students will form a set of personal strategies for reading and writing. Note: A grade of "C" or better is required to take ENG 098. Prerequisite: ENG 093 with a grade of "C" or better, or placement via assessment test. Class: 6 hours per week. (Fa,Sp) no credit

ENG 098: Preparatory College Reading and Writing III

This course is designed for students who need to further develop their capabilities in language use—reading, writing, thinking, and speaking - to prepare them for the kinds of assignments they will be asked to complete in ENG 111 and beyond. Students will read, discuss, think and write about a number of topics. Note: A grade of "C" or better is required to take ENG 111. Prerequisite: ENG 096 with a grade of "C" or better, or placement via assessment test. Class: 3 hours per week. (Fa,Sp,Su) no credit

ENG 100: Basic Study Skills

This course is designed for and required of all students enrolled in the Adults in Transition program. Taken just before their first semester, this course introduces students to fundamental study skills. It presents these skills as processes and shows how they relate to and reinforce one another. Class: 15 hours. (Fa,Sp) 1 credit

ENG 103: Reading Dynamics and Study Skills

This course enhances reading and study skills on an individualized and group basis. The course includes the following areas: reading comprehension, note taking, memory training, time management, outlining procedures, library skills, study skills, and strategies for taking essay and objective examinations.. [H,L] (O) 3 credits

ENG 106: ESL - Structure I

This is the beginning level of content-based grammar for the ESL student. Students will practice grammatical patterns as well as pronunciation, stress and intonation. Class: 4 hours per week. Note: ENG 106 may be taken concurrently with ENG 116; however, permission of the instructor is required. [H,L] (Fa,Sp) 4 credits

ENG 107: ESL - Structure II

This course is the intermediate level of content-based grammar for the ESL student. Students will practice grammatical patterns as well as pronunciation, stress and intonation. Class: 4 hours per week. Prerequisite: "C" or better in ENG 106 or appropriate assessment test score or permission of instructor. ENG 107 may be taken concurrently with ENG 117; however, permission of the instructor is required. [H,L] (Fa,Sp) 4 credits

ENG 111: College Reading and Writing

This course is designed to introduce students to "the language of the academy"—that is, to the complex literacies of reading, writing, thinking, and speaking required of college students regardless of their area of specialization. ENG 111 also introduces students to the specific requirements and standards of academic writing, including essay format, voice, and organizational strategies. Class: 3 hours per week. Prerequisite: ENG 098 with a grade of "C" or better, or placement via assessment test. [H,L] (Fa,Sp,Su) 3 credits

ENG 112: Reading and Writing for Academic Research

This is a course designed to develop and refine the advanced skills in composition that are essential for both academic and professional writing. Emphasis will be on writing from data (outside sources). The main areas covered will be exposition, argumentation, and the research paper. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of "C" or better. [H,L] (Fa,Sp,Su) 3 credits

ENG 114: Technical Writing

This course focuses on the researching, writing, and editing of documents commonly found in the fields of science, technology, and business. Major topics covered include memo reports, instructions, proposals, progress reports, abstracts, document design, and documentation styles for technical reports. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of "C" or better. [H,L] (Fa,Sp) 3 credits

ENG 115: Critical Thinking

This course is designed to help students sharpen their analytical skills and deal clearly and logically with information. The role of language and perception in the reasoning process will be explored. Reading, writing, research, and discussion will cover a broad spectrum of controversial topics and open-ended problems. This class will help student, not only with other college courses, but with life! [H,L] (O) 3 credits

ENG 116: ESL - Reading/Writing I

This is a beginning course of reading and writing in ESL. It also concentrates on proper spelling, punctuation, and capitalization in written paragraphs. Class: 4 hours per week. Prerequisite: "C" or better in ENG 106 or appropriate assessment test score or permission of instructor. ENG 116 may be taken concurrently with ENG 106; however, permission of the instructor is required. [H,L] (Fa,Sp) 4 credits

ENG 117: ESL - Reading/Writing II

This is an intermediate course of reading and writing in ESL, emphasizing reading comprehension, inference and critical thinking strategies, as well as more complex paragraph format and eventual essay development. Class: 4 hours per week. Prerequisite: "C" or better in ENG 107 or appropriate assessment test score or permission of the instructor. ENG 117 may be taken concurrently with ENG 107; however, permission of the instructor is required. [H,L] (Fa,Sp) 4 credits

ENG 118/ED 118: Children's Literature

(Fa,Sp,Su) 3 credits. *See Education.*

ENG 120: Introduction to Literature

This course is an introduction to the thematic and formal elements of literatures of diverse cultures, with an emphasis on fiction, poetry, drama, and the essay, with the aim of developing interpretive reading and writing skills. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of "C" or better. [H,L] (Fa,Sp,Su) 3 credits

ENG 140: Film and Literature

This course explores what happens when classic (and not-so-classic) works of fiction and drama are brought to the screen. In studying specific literature-

to-film adaptations, students examine the elements of both media (metaphor, narration, symbol, shot, sound, editing) and debate what differences, if any, exist between so-called serious art and entertainment. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of "C" or better. [H,L] (O) 3 credits

ENG 202: British Literature II

A survey of representative figures and concerns in British literature from 1799 to the Modern Period. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (Fa) 3 credits

ENG 203/BOT 203: Advanced Editing and Proofreading

[H,L] (Fa) 3 credits. *See Business Office Technology.*

ENG 220: Introduction to Contemporary Women Poets

A seminar on the lives and work of women poets from 1950 to the present. Students will read, discuss, and analyze poems and explore how they reflect the life and times of the author. Students will keep a journal to record their understanding of the poems and to explore how the poems reflect their own experience. Class: 3 hours per week. Prerequisite: ENG 111 or permission of the instructor. [H,L] (O) 3 credits

ENG 221: Creative Writing: Fiction

A workshop experience in which students write a polished story (or stories) and study the short stories of published writers and fellow students. Class: 3 hours per week. Prerequisite: ENG 111 or permission of the instructor. [H,L] (Fa) 3 credits

ENG 222: Creative Writing: Poetry

A workshop in which students write and polish poems and study the poems of published writers and fellow students. Class: 3 hours per week. Prerequisite: ENG 111 or permission of the instructor. [H,L] (Sp) 3 credits

ENG 232: Ireland and Her Literature

A survey of the literature of Ireland from the earliest texts in translation to contemporary poetry, fiction, and drama, viewing the literature in the context of Irish cultural, social, and political history. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (O) 3 credits

ENG 245: American Literature I

An examination of writings from the era spanning the arrival of Columbus to the Civil War. Topics covered include Native American tales and oratories, slave folklore, and both the popular and "classic" works of writers from the Puritan period, the eighteenth century, and the American Renaissance. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (Fa) 3 credits

ENG 246: American Literature II

A study of major American writers from the late 19th century to the present day, with a focus on their contributions to the rapid and unique changes in style, form, and content that mark the literary tradition of 20th century America. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (Sp) 3 credits

ENG 251: Western World Literature I

This course introduces students to Western literature from the Greeks through the Renaissance and (for purposes of comparison) to a variety of so-called "non-canonical" texts from writers who until very recently were not studied in college classrooms. Students will examine the poetic and narrative strategies of writers from a variety of classes and cultures. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (O) 3 credits

ENG 252: Western World Literature II

This course introduces students to Western literature from the Age of Reason through the Modern Period and (for purposes of comparison) to a variety of

so-called "non-canonical" texts from writers who until very recently were not studied in college classrooms. Students will examine the poetic and narrative strategies of writers from a variety of classes and cultures. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (Fa,Sp) 3 credits

ENG 271: Women in Literature

This course explores the nature, roles, relationships, and feelings of women as expressed by women writers in various literary genres (essays, short stories, personal reflections, poems, plays and novels). Students will read the works of women writers of the 17th, 18th, 19th, and 20th centuries who share their ideas and understanding of what it is to be human and, particularly, to be female. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (Fa) 3 credits

Environmental Science

EVSC 100: Introduction to Environmental Science

An introduction to the problems of physical resources management and aspects of ecological concern in our natural environment, with emphasis on our demand for energy, the consumption of our natural resources, resource pollution, and waste management. Alternate sources of energy are explored. Class: 3 hours per week. [L,N] ((Fa,Sp,Su) 3 credits

EVSC 102: Environmental Site Assessment

This course provides an introduction to the reasons, methods, and requirements for conducting initial property environmental studies, called site assessments. Site assessments are often required for real estate transactions. These assessments evaluate whether environmental problems, such as leaking underground tanks, soil pollution, ground water contamination, radon, asbestos, or PCBs are present. Class: 3 hours per week. Prerequisite: EVSC 100 (may be taken concurrently). 3 credits

EVSC 104: OSHA-HAZWOPER Training

This course provides the training required by 29 CFR110.120, and NFPA standards for hazardous waste site workers, and those involved in emergency response to incidents involving hazardous materials. Class: 3 hours per week. Prerequisites: CHEM 111 (may be taken concurrently) and EVSC 100. 3 credits

EVSC 110: Fundamentals of Solar Energy

A study of the availability and use of solar energy as an alternate energy source. Consideration is given to both air and liquid systems with specific application to active and passive solar energy systems. Class: 3 hours per week. [L,N] (O) 3 credits

EVSC 121: Hazardous Materials Management I: Chemical Safety

An overview of state and federal regulations and procedures for chemical use, management, disposal and safe handling. Prerequisites: CHEM 112, EVSC 100, and MATH 115. Class: 3 hours per week. (Fa) 3 credits

EVSC 122: Hazardous Materials Management II: Pollution Control

A continuation of Hazardous Materials Management I: Chemical Safety. This course will investigate strategies for the control of hazardous materials to minimize environmental release and contamination, and also hazardous materials cleanup. Prerequisites: EVSC 121, Hazardous Materials Management I. Class: 3 hours per week. (Sp) 3 credits.

EVSC 165: Field Methods for Environmental Monitoring

A course with field applications using environmental monitoring and sampling equipment and procedures. Prerequisites: BIO 101, CHEM 112, EVSC 102, MATH 111 and MATH 115. Class: 3 hours per week. Laboratory: 3 hours per week. (Sp) 4 credits

Finance

FNCE 150: Investment Basics

Introduction to the basics of money management: budgeting, saving, and investing. Students will develop an understanding of reconciling bank or brokerage statements, reading stock, bond, and mutual fund listings in *The Wall Street Journal*, and learning what to look for in a mutual fund prospectus and an annuity contract. Students will also be introduced to various retirement programs (IRA, Keogh, 401k, 403b, etc.). [B] (Fa,Sp) 1 credit

FNCE 210: Fundamentals of Personal Financial Planning

A survey of the financial planning process, introduction to regulations affecting financial planners, construction of financial statements, analysis of client's current financial situation, overview of economic environment, presentation of time value of money concepts, and introduction to case analysis. Financial calculator required; HP 12-C recommended. Prerequisite: ACCT 101 or the permission of the program coordinator. [B] (Fa,Sp) 3 credits

FNCE 220: Risk Management

Principles of risk management; the insurance contract and concepts relating to life insurance, property and liability insurance, medical and disability insurance, and social insurance; case analysis evaluating insurance needs; and selecting appropriate risk management techniques are covered. Time value of money calculations using financial calculator. Prerequisite: FNCE 210 or permission of program coordinator. [B] (O) 3 credits

FNCE 230: Investment Management

Principles of investment management, including the study of stocks, bonds, government securities, mutual funds, futures, options, and tangible assets for investment to construct and manage an investment portfolio with knowledge of risk and tax considerations are covered. Time value of money calculations using financial calculator. Prerequisite: ACCT 101 and FNCE 210, or permission of program coordinator. [B] (O) 3 credits

FNCE 240: Tax Planning and Management

A study of the principles of tax planning and management, including the study of tax law, terminology and calculation; tax implications of selecting a particular form of business; tax-advantaged investments; tax planning techniques; intrafamily and charitable transfers; and tax traps. Prerequisite: FNCE 210, or permission of program coordinator. [B] (O) 3 credits

FNCE 241: Corporation Finance

A study of the principles and techniques of financial management, covering money and capital markets, financial analysis, working capital management, long-term financing, time value of money, risk, leverage, and cost of capital. Prerequisite: ACCT 102. [B] (Fa,Sp) 4 credits

FNCE 250: Retirement Planning and Employee Benefits

A survey of the key terms and concepts of retirement planning and analysis of employee benefit programs using time value of money calculations. Students will study both private corporate pension plans and government programs, including social security and Medicare, as well as qualified and nonqualified corporate programs. Prerequisite: FNCE 210 or permission of program coordinator. [B] (O) 3 credits

FNCE 260: Estate Planning

A survey of principles of estate planning, including discussion of descent and distribution, wills, intestacy, probate and administration, Probate Court, estate and gift tax returns, and fiduciary accounting. Prerequisite: FNCE 210 or permission of program coordinator. [B] (O) 3 credits

FNCE 265: Personal Financial Planning Case Study and Analysis

A course covering case study and analysis and integration of the six major areas of personal financial planning. Upon completion of the course, students

will be able to analyze a case and prepare an appropriate financial plan for a variety of clients. Prerequisites: FNCE 210, FNCE 220, FNCE 230, FNCE 260, ACCT 226 or permission of the program coordinator. [B] (O) 3 credits

Fine Arts

FA 101: History of Art I

The history and appreciation of fine arts (painting, sculpture, architecture, etc.) from prehistoric through medieval eras. Outside reading and visits to galleries and museums are required. Class: 3 hours per week. [H,L] (Fa) 3 credits

FA 102: History of Art II

The history and appreciation of fine arts (painting, sculpture, architecture, etc.) from the Renaissance through the 20th century. Outside reading and visits to galleries and museums are required. Class: 3 hours per week. [H,L] (Sp) 3 credits

FA 105: History of 20th Century Art

Visual art movements of the past 100 years from Impressionism and Cubism to today's art. Outside reading and visits to galleries and museums are required. Class: 3 hours per week. [H,L] (Fa,Sp) 3 credits

FA 106: Women in the Visual and Performing Arts

This course will address the cultural biases that have relegated women artists to the 'back burner' of mainstream cultural aesthetics. A historical survey of women's contributions to the visual and performing arts will augment, inquiry into philosophical questions such as: "Is there a 'Feminist' Aesthetic?" or "Who determines what is 'great' art?" Class: 3 hours per week. [H,L] (O) 3 credits

FINE ARTS STUDIO COURSES: Students enrolled in fine arts studio courses are responsible for buying any supplies required for satisfactory completion of the course. All studio courses are open to both beginning and advanced students. Advanced students may work on individual projects. Studio courses meet 6 hours per week.

FA 115: Introduction to Studio Art

A course covering the fundamentals of visual art through hands-on experience. The course includes basic design and composition, color theory, drawing and a thorough exploration of the creative process through the use of a wide variety of media and techniques including drawing, water media, collage and fiber. [H,L] (O) 3 credits

FA 121, FA 122, FA 223, FA 224: Drawing I/II

This course covers the basic elements, media and processes of drawing including composition and perspective. Extensive drawing from still-life, landscape and the live model will emphasize development of students' manual, perceptual and conceptual skills. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. *May be taken up to four times as FA 121, 122, 223 and 224, all of which run concurrently.*

FA 125: Two Dimensional Design

The theory and practice of design principles: compositional problems, color and the interrelationships of space, planes and volumes are examined in two dimensional projects using a variety of media. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits.

FA 126: Three Dimensional Design

Investigation of spatial design as a decision-making and problem-solving process bounded by criteria such as human sensory systems, basic structural systems and materials. Class activities will include studio assignments, demonstrations, lectures, slide presentations, museum visits and critiques. Studio problems will be worked on during and outside of class time. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits

FA 127, FA 128, FA 227, FA 228: Figure Drawing

This in-depth course is based in both anatomical and expressive approaches to human figure drawing. A variety of media will be explored, including color and wet media, along with instruction in composition, proportion and foreshortening principles. Students will work extensively from the live model. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. *May be taken up to four times as FA 127, 128, 227, 228, all of which run concurrently.*

FA 131, FA 132, FA 233, FA 234: Painting

A course in the technical and aesthetic fundamentals of painting, covering construction of a canvas, selection and use of materials, basic color theory, and realistic and expressive paint handling. Students will work in both traditional and experimental painting styles. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. *May be taken up to four times as FA 131, 132, 233, 234, all of which run concurrently. Experience in drawing is strongly recommended.*

FA 137, FA 138, FA 237, FA 238: Water Color

An introduction to the technical and aesthetic principles of painting with water media, primarily water color. This course will cover the selection and use of water media materials in a variety of styles and deal with varied subject matter from the still life to the landscape. Design elements and compositional problems are also included. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. *May be taken up to four times as FA 137, 138, 237, 238, all of which run concurrently. Experience in drawing is strongly recommended.*

FA 141, FA 142, FA 143, FA 144: Printmaking

A course in the materials, design and techniques of printmaking: monoprinting, intaglio, relief, planographic and serigraph. Studio: 6 hours per week. [H,L] (Fa) 3 credits. *May be taken up to four times (when offered) as FA 141, 142, 143 and 144, all of which run concurrently.*

FA 151, FA 152, FA 253, FA 254: Sculpture

A course in the principles, techniques, and materials of sculpture (metal fabrication/welding, casting, plaster, wood, etc.). Students will concentrate on controlling sculptural media and examining the fundamentals of three-dimensional design. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. *May be taken up to four times as FA 151, 152, 253, 254, all of which run concurrently.*

FA 161, FA 162, FA 163, FA 164: Creative Crafts: Fiber Arts

A course in contemporary and traditional means of making art with fibers including weaving, soft sculpture, batik, tapestries, paper making and coiling. Studio: 6 hours per week. [H,L] (O) 3 credits. *May be taken up to four times as FA 161, 162, 163 and 164, all of which run concurrently.*

FA 165, FA 166, FA 267, FA 268: Ceramics

Experimentation with, and development of, basic skills in a variety of hand-forming, wheel-throwing, firing and glazing techniques. The class focuses on processes involved in creating both utilitarian and sculptural works. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. *May be taken up to four times as FA 165, 166, 267 and 268, all of which run concurrently.*

FA 171/COMM 171: Film Study and Appreciation

[H,L] (Fa,Sp,Su) 3 credits. *See Communications.*

FA 176/COMM 176: Video/Filmmaking

(Fa) 3 credits. *See Communications.*

FA 201: Illustration I

A studio course designed to develop fundamental graphic rendering skills. The course explores a variety of materials and media through the creation of images. The emphasis is on the translation of concepts into visuals. (May be taken up to 4 times for credit.) [H,L] (Fa,Sp) 3 credits

FA 202, FA 203, FA 204: Illustration II, III, IV

These studio courses expand the skills and techniques of translating concepts into visual form that were learned in FA 201, with a greater emphasis on project development and professional presentation. [H,L] (Fa,Sp) 3 credits

FA 205: Graphic Design I

An introduction to communication design and basic studio skills with an emphasis on developing the ability to convert creative concepts into a visual medium. The course covers design layout, typography, the development of graphic identity, portfolio development and mechanical preparation. [H,L] (Fa,Sp) 3 credits. *May be taken up to four times for credit.*

FA 206, FA 207, FA 208: Graphic Design II, III, IV

Subsequent semesters of graphic design build on fundamentals covered in FA 205 but place a greater emphasis on professional design presentation through the development of more complex projects. [H,L] (Fa,Sp) 3 credits

FA 210: Computer Graphics I

An introduction to creating images using the Macintosh computer. Students will learn basic imaging skills through the use of several software programs. Previous drawing or design experience is helpful and no prior computer skills are required. [L] (Fa,Sp) 3 credits

FA 211, FA 212, FA 213: Advanced Computer Graphics

This course is a continuation of computer imaging skills developed in FA 210 but with an emphasis on creating and executing design projects on the computer. The course includes instruction in advanced software such as Adobe Illustrator and Adobe Photoshop as well as such topics as image scanning, memory management and color outputting. Studio: 6 hours per week. (Advanced Computer Graphics may be taken up to three times for credit.) Prerequisite: FA 210 or permission of instructor. [L] (Fa,Sp) 3 credits

FA 251/COMM 251, FA 252/COMM 252: Computer Animation

[L] (Fa,Sp) 3 credits. *See Communications.*

FA 270: Cooperative Education/Work Experience

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their programs of study including corporations, publishing/graphic design firms and newspapers. Prerequisite: 15 completed credit hours in Graphic Design. (Fa,Sp) 3 credits. *Please refer to page 19 for more information and general prerequisites for Cooperative Education/Work Experience.*

French**FREN 101: Elementary French I**

An introduction to spoken and written French and Francophone culture. Emphasis is on communication through development of skills in conversation, reading and writing based upon the principles of French grammar and pronunciation. No previous knowledge of French is required. Class: 4 hours per week. [H,L] (Fa) 4 credits

FREN 102: Elementary French II

The second half of Elementary French. Practice in conversation, reading and writing, and the study of French grammar and culture as an aid to communication. Class: 4 hours per week. Prerequisite: FREN 101 or one year of high school French, or permission of instructor. [H,L] (Sp) 4 credits

FREN 108: Elementary French I and II

An intensive beginning French course in which FREN 101 and 102 are completed in one semester. This course is a study of written and spoken French and Francophone culture with emphasis on oral proficiency through audio and video tapes. Class: 8 hours per week. [H,L] (O) 8 credits

FREN 111: French Conversation

This course is designed for the student with no previous French experience who needs French vocabulary and grammar which is useful for the traveler. The emphasis will be on oral communication and comprehension. [H,L] (O) 3 credits

FREN 125: French Culture and Civilization

This course, taught in English, will acquaint the student with French customs and culture. In addition to an overview of French history, the course will present life in France today and will provide practical information for those intending to visit France. [H,L] (O) 3 credits

FREN 130: France Today

This course is designed as a companion course to the academic travel program. It is open only to participants on the trip and is conducted as an independent study course before, during and after the trip. Credits: 1, 2, or 3 credit hours (the number of credit hours earned depends on the nature of the trip, the final project, and the extent of participation). Corequisite: student must participate in an academic trip sponsored by MCC. [H,L] (O) 1, 2 or 3 credits

FREN 201: Intermediate French I

An intermediate level study of the principles of French grammar and basic vocabulary as a means of developing skills of conversation, reading and writing. The course includes the study of Francophone culture. Class: 4 hours per week. Prerequisites: FREN 101 and 102, 108, or two years of high school French, or permission of instructor. [H,L] (Fa) 4 credits

FREN 202: Intermediate French II

This course is the second half of Intermediate French. The course will work to continue to develop skills in listening, speaking, reading and writing, including reading from selections on Francophone culture. Class: 4 hours per week. Prerequisites: FREN 101 and 102, or two years of high school French, or permission of instructor. [H,L] (Sp) 4 credits

FREN 251: Advanced French I

This course allows students to perfect their skills in French. Oral and written practice will be based on cultural and literary readings. Prerequisites: FREN 202, or three years of high school French or permission of instructor. [H,L] (O) 3 credits

FREN 252: Advanced French II

This course is the second half of Advanced French. Students will read, discuss and write about excerpts from literary masters of the French-speaking world. Prerequisite: FREN 251 or three years of high school French or permission of instructor. [H,L] (O) 3 credits

Geography**GEO* 101: Introduction to Geography**

(formerly GEOG 101: *People and Land: Introduction to Geography*)

This course introduces some of the many topics geographers examine to explain the relationship between people and place. Topics include the physical earth, i.e. how mountains and lakes form, cultural patterns such as how languages in neighboring countries are related, population analysis, like human migration trends, and economic analysis including growth and decline of regions. Geographic factors that underlie current political, social and economic problems will also be explored. [L,S] (Fa,Sp,Su) 3 credits

GEO* 111: World Regional Geography

(formerly GEOG 111)

This course provides the student with a survey of the lands, peoples, and places in the world's major cultural regions. Students explore the interaction

between the physical environment and cultural, political and economic conditions in regions such as South and Central America, Asia, Africa and the Middle East. This course provides a background for understanding world events. [L,S] (Fa,Sp,Su) 3 credits

GEO* 201: Urban Geography

(formerly GEOG 201)

The history, nature and function of urban settlements are considered, with attention to geographic problems of urban areas. Introduction to practical problems, using census data, interpretation of aerial photographs, G.I.S. and map construction. Class: 3 hours per week. [L,S] (Sp) 3 credits

GEO* 202: A Geography of the United States and Canada

(formerly GEOG 202)

A regional study of the environmental, cultural, political and economic patterns that give character to the different parts of the U.S. and Canada. Historical and contemporary factors are considered to determine the place of this region in the modern world, with a focus on the changing role of the U.S. in the global marketplace. [L,S] (Sp) 3 credits

GEO* 203: This Fragile Planet: Toward an Environmentally Responsible World

(formerly GEOG 203)

An introduction to the global environmental dilemma from the end of the 20th century perspective. Attention to natural and cultural environmental problems with stress on causes, remedial action, policy and politics. [L,S] (Fa) 3 credits

GEO* 204: Geography and Tourism Development

(formerly GEOG 204)

The course introduces students to tourism and the components that link geography and travel together. The tourism system model of demand, travel, destination, and marketing is discussed. This course also gives insight into tourism planning; impacts on the water, land, and air; travel geography; travel modes; accommodations; support industries; resorts; tourism regulation; consumer behavior; and trends. The comprehensive view outlined in the course brings to the forefront the immense proportions of world tourism. [L,S] (Sp) 3 credits

GEO* 205: Physical Geography and Human Activity

(formerly GEOG 205)

In order to understand the human physical environment, physical geography examines the atmosphere, lithosphere and hydrosphere — our life zone, the biosphere. This course will examine each of these earth layers and their connectivity in order to provide students with an understanding of the world around them. Class: 3 hours per week. [L,S] (O) 3 credits

GEO* 246/CIS 246: Introduction to Geographic Information Systems (GIS)

(formerly GEOG 246/CIS 246)

[B,L,S] (Sp) 3 credits. See CIS 246 under Computer Information Systems.

Geology**GEOL 110: Introduction to Physical Geology**

An introduction to the principles governing the composition and structure of the Earth's crust, and the study of land forms and geological processes on and within the Earth's surface. Topics include rock-forming minerals, rocks, fossils, glaciers, earthquakes, volcanoes, plate tectonics and mountain building. Field trips will be required as a component of the laboratory. Class: 3 hours per week. Laboratory: 3 hours per week. [L,N] (Fa,Sp) 4 credits

Gerontology

GERN 161: Aging America: Issues and Dilemmas

This course will introduce a multidisciplinary approach to the study of aging. Students will learn how to separate the facts from the stereotypes about aging and to examine basic sociological, psychological and physiological factors that affect the aging process. Class: 3 hours per week. [L,S] (Sp) 3 credits

Health, Physical Education

The College offers instruction in many different kinds of athletic activities and an associate degree in Sport and Exercise Studies. Consult the class schedule for the list of health, and/or physical education courses offered each semester.

HPE 114: Aerobics

This course is designed to introduce information about the components of fitness and help students utilize this information to become motivated and get the most out of their fitness program. Through the aerobics activity, students may use the skills learned to make exercise part of their daily lives. (Fa,Sp) 1 credit

HPE 115: Weight Training

This course provides the skills and techniques necessary to begin a personal weight-training program. It will cover topics such as: facilities, equipment, principles and proper nutrition. Emphasis will be on the physiological basis for muscle strength and endurance while utilizing the most effective and efficient training techniques. (Fa,Sp) 1 credit

HPE 116: Fitness Walking

This course is designed to promote fitness and wellness through walking. It offers students an opportunity to develop a lifetime fitness activity and will improve cardio-respiratory endurance and body composition. Basic principles of fitness such as target heart rate, maximum heart rate, resting heart rate, recovery rate will be utilized in developing a walking program to meet individual needs. (Fa,Sp) 1 credit

HPE 120: Principles of Fitness

A survey of sport/exercise/fitness physiology and its application to sport performance and fitness. Emphasis will be placed on the study of physiological changes associated with the human body as you begin training for various sports. This will include the cardiovascular system, respiratory system, endocrine system, neuromuscular physiology, bone health, and essential nutrient intake. (Sp) 3 credits

HPE 114: Aerobics (Fa,Sp) 1 credit

HPE 115: Weight Training (Fa,Sp) 1 credit

HPE 116: Fitness Walking (Fa,Sp) 1 credit

HPE 125: Beginning Tennis (Fa,Sp) 1 credit

HPE 126: Racquetball (O) 1 credit

HPE 127: Beginning Badminton (O) 1 credit

HPE 128: Volleyball (O) 1 credit

HPE 129: Basketball (O) 1 credit

HPE 130: Softball (Fa,Sp) 1 credit

HPE 131: Soccer (Fa,Sp) 1 credit

HPE 132: Bowling (Fa) 1 credit

HPE 133: Beginning Golf (Sp) 1 credit

HPE 138: Self Defense-Elementary Tae Kwon-Do (O) 1 credit

HPE 140: Introduction to Athletic Training

(formerly Medical Aspects of Sport)

An introduction to the basic concepts and techniques in the prevention, diagnosis, treatment and rehabilitation of athletic injuries. Practical applications are examined as the basic concepts of training, conditioning, diet and nutritional needs are presented. Extensive experience in taping and on field care is an important aspect of the course. (Fa) 3 credits

HPE 141: Principles & Practices of Coaching

An introduction to the basic principles and practices required in dealing with the arrangement, administration and organization of athletic programs. Emphasis is on coaching athletic teams: legal responsibilities, historical perspectives of sport, ethics of coaching, philosophy of coaching, sport psychology, sport pedagogy, sports medicine and safety. (Fa,Sp) 3 credits

HPE 158: Adventure Based Dynamics

This course is designed to provide students with the knowledge, skills, and ability to: increase mutual support within diverse groups; develop leadership skills; increase skills in cooperative learning; develop team building skills; improve agility and interactive skills through hands-on experiences. Students will participate in problem solving situations and exercises to assist in the development of these skills. (Fa,Sp) 1 credit

HPE 160: First Aid and Safety

This course provides the skill and knowledge needed in the immediate care of injured persons and seeks to create a safety consciousness for accident prevention. American Red Cross certificates are awarded to those who qualify. The prevention and care of basic athletic injuries are also studied. Class: 2 hours per week. (Fa,Sp) 2 credits

HPE 161: Physical Fitness and Exercise

This course is designed to provide the background information concerning exercise prescription, development and follow through. Students will be trained in exercise testing, theory and ethics, and practical exercise programs for the beginning exerciser. They will receive a practical understanding of all aspects of fitness center operations from both a fitness specialist and management point of view. (Sp) 3 credits

HPE 165: Professional Practicum

This course is designed to allow qualifying students the opportunity to gain on-campus and/or off-campus teaching, coaching, supervision, or practical experience under the supervision of a program coordinator and in cooperation with a qualified professional when appropriate. The student will perform 40 hours of work for each semester hour of credit. This work will reflect the duties of the intern as outlined and agreed upon by the student and the program coordinator. (Fa,Sp) 1-3 credits

HPE 201: Introduction to Physical Education

An introduction to the professional aspects of physical education. Includes the history, philosophy and foundation of the role of physical education in society today. Topics in the course will involve the philosophical and scientific foundations of physical education and an examination of literature, scientific inquiry, exercise prescription, and career options available. 3 credits

HPE 202: Adapted Physical Education

An introduction to the instructional adaptations necessary to meet the physical activity needs of students with disabilities. Individual assessments, educational planning, service delivery and advocacy for special needs, are content areas stressed in this course. It draws on the fields of adapted physical education, special education, psychology, medicine, occupational therapy, physical therapy, and therapeutic recreational service to provide a complete, comprehensive resource. Prerequisite: HPE 201 or permission of the instructor. 3 credits

History

HIST 101: Western Civilization Through the Reformation

An examination of major themes in the development of Western Civilization from the earliest historical beginnings. Topics include: Ancient Middle East, Greece and Rome, Medieval and Renaissance Europe. Class: 3 hours per week. [H,L,S] (Fa,Sp,Su) 3 credits

HIST 102: Western Civilization Since the Reformation

A continuation of HIST 101, examining the history of Western Civilization from the Protestant Reformation to the Cold War. Class: 3 hours per week. [H,L,S] (Fa,Sp) 3 credits

HIST 121: World Civilization I

Beginning with an examination of the most ancient human societies, as revealed in the archaeological record, the course goes on to study the origin, development and spread of the major civilizations in the world, their contacts, interactions and cross-fertilization down to the point at which the civilization of Western Europe begins its world-wide expansion. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 122: World Civilization II

This course studies the major trends and conflicts throughout the world after 1500 to the present, focusing on the impact of and reaction to the Western world through slavery, imperialism, the two world wars, and the Cold War. Class: 3 hours per week. [H,L,S] (Sp) 3 credits

HIST 201: United States History I

The course represents a social, political, and economic survey of America beginning before the arrival of Columbus and continuing to 1877 through an analysis of the transformation from Native American to Anglo-American society, from sectionalism to national unity, from westward expansion to urban development and an examination of the forces shaping American thinking and society. Other topics will feature race, ethnicity, women, and family issues. Class: 3 hours per week. [H,L,S] (Fa,Sp,Su) 3 credits

HIST 202: United States History II

The course represents a social, political, and economic survey of the United States from 1877 to the present through an analysis of the growth of transportation, industrialization, urbanization, technology, and imperialism and an analysis of their effects in shaping American thinking and society. The discussion will also feature women's suffrage, civil rights, and ethnic and minority issues. Class: 3 hours per week. [H,L,S] (Fa,Sp,Su) 3 credits

HIST 204: The City in American History

An examination of the impact of the city upon American life, centered around the transformation from the 17th century, pre-industrial town to the post-industrial 20th century city. Field trips are included. Class: 3 hours per week. Prerequisite: any one of the following: GEO* 101; HIST 201, 202 or 215; CJ 111; HS 101; SOC 101. [H,L,S] (O) 3 credits

HIST 210: Colonial History

A study of the 13 American colonies in the 17th and 18th centuries with emphasis on the Europeans and Africans who settled the colonies. Field trips will be included. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 215: America Since 1945

America's political, social, intellectual and diplomatic history, with emphasis on the period from 1945 to present. Topics include: the Cold War and Détente, the quest for social justice, the changing face of urban America, race relations, social and political upheavals. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 220: Racial and Ethnic History of the United States

This course will examine immigration to this country from Europe, Africa, Asia and Latin America. It will explore whence we came and why, and how we adapted to life in the United States while retaining emotional attachments to our homelands. Field trips and slide lectures complement class discussions and readings. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 222: Modern Ireland

Study focuses on the political, social, cultural and economic development of Ireland after 1600. Major themes discussed include: Ireland's relationship with Britain, the role of the Catholic Church, emigration, and the creation of the divided modern Irish state. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 224: Native American Peoples: A Survey of the History of American Indians

The course offers students a balanced perspective of Native American people from an ethnohistory point of view. By studying primary sources, including the voices of native people, formal historical texts and the popular press, the course will offer a new look at the complex story of the original residents of the North American territory that we now call the United States. Class: 3 hours per week. [L,S] (O) 3 credits

HIST 227: The Vietnam War

This course will analyze the history of America's role in Vietnam from 1945 to 1975. To understand the Vietnam War, however, broad themes must be assessed such as the history and culture of Vietnam, the rise of the Third World, and the impact of the Cold War on U.S. Vietnam policy. Other important issues that will be discussed include the importance of domestic affairs on the Vietnam War, the U.S. Military's role in the war, and the world-view of U.S. Presidents as diverse as Dwight Eisenhower and Lyndon Johnson. Because the war has produced a long-lasting legacy on American culture, the post Vietnam War years will also be examined in detail. How the last three decades of politics, music, film, and literature have been influenced by the Vietnam War will be subject of in-depth analysis. [H,L,S] (O) 3 credits

HIST 230: African American History I

A study of the life of transplanted Africans and their descendents in the Americas with an emphasis on British North America and the United States before 1877. Students will explore a variety of issues such as the causes of the African slave trade, the impact of slavery on both whites and blacks, the African influence on American culture, the slaves' contribution to the growth of the American economy and industrialization, the rhetoric and reality of freedom and slavery, and the cause and legacy of the Civil War. Class: 3 hours per week [H,L,S] (O) 3 credits

HIST 242: Europe in the 20th Century

An introductory survey of the diplomatic, political, social and intellectual history of Europe from 1914 to present. Class: 3 hours per week. Prerequisite: 3 hours of college history. [H,L,S] (Sp) 3 credits

HIST 251: History of Women in the U.S.A.

A study of American women from pre-contact period to the late 20th century. Special emphasis will be given to the effects of race, class and ethnic origins on the history of particular groups of American women. [H,L,S] (O) 3 credits

HIST 261: From Village Green to Mill Town: The Transformation of American Life in the 19th Century

This course uses modernization theory to explain the changes in American life from the end of the War of 1812 to 1890. Particular emphasis will be placed on economic and technological developments, especially in industry and transportation. The increased authority and operations of the Federal

Government will be considered. These changes will be viewed as the result of mostly conscious decisions to increase human control over the environment. Attention will be paid to the less anticipated effects of these changes on family and community life. [H,L,S] (O) 3 credits

HIST 270: Far Eastern Civilization

The major political, social and intellectual developments in China and Japan from earliest times to the present. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 280: Modern Africa

Modern Africa focuses on the history of the continent after 1500 through the study of African states and societies on the eve of European contact, the impact of the Trans-Atlantic slave trade, the Scramble for Africa, de-colonization and the creation of contemporary African states. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 281: Modern China

The impact of Western encroachment on China in the 19th century, the attempts of China to deal with the West and with problems arising from contact with the West, the Revolution of 1911 and the period of Nationalist control, the conflict with Japan, the growth and victory of the Communist Party, and the internal changes wrought by the People's Republic of China since 1949 will be studied. Class: 3 hours per week. Prerequisite: 3 hours of college history. [H,L,S] (O) 3 credits

HIST 284: South Africa

This course will analyze the history of South Africa from pre-Colonial times through the end of Apartheid and the establishment of majority rule in 1994. South Africa's history offers a unique look at European colonialism in Africa and the implementation of legislative racism from the 1940s on. Analyzing South Africa's mineral revolution of the mid-nineteenth century allows the studying of labor migration and its impact on traditional African societies, their traditions, norms, and mores. [H,L,S] (O) 3 credits

Hospitality Management

HOSP 101: Basic Foods Preparation

Introduces techniques and procedures required to prepare basic foods, with emphasis on use of equipment, identification of a standard quality product, and the importance of methods by which to develop sanitary working habits. Class: 1 hour per week. Laboratory: 3 1/2 hours per week. Prerequisite: eligibility for MATH 101 or MATH 098 taken concurrently. [B] (Fa,Sp) 3 credits

HOSP 102: Regional American Cuisine

Full-course regional American menus are prepared in quantity. Students experience various responsibilities in the dining room and kitchen areas. Emphasis is on preparation or recipes, purchase orders, requisitions and income and expense summaries. Class: 1 hour per week. Laboratory: 5 hours and 30 minutes per week. Prerequisite: C- or better in HOSP 101. (Fa,Sp) 4 credits

HOSP 105: Cake Decorating

The class introduces students to the fundamentals and necessary skills needed for commercial cake decorating. Class: 1 hour per week. Laboratory: 3 hours per week. [B] (Fa,Sp) 2 credits

HOSP 106: Food Safety Certification

The course will cover the basics of food safety. It will prepare students to sit for a nationally recognized food safety certification exam. This exam meets the mandatory food safety certification requirement for the state of Connecticut. Class: 1 hour per week. [B] (Fa,Sp) 1 credit

HOSP 111: Introduction to the Hospitality Industry

A survey course encompassing three major areas of the Hospitality Industry: the foodservice industry including restaurants, institutions, clubs, and schools; the hotel-motel industry, including travel and tourism; and hospitality management theories, styles, and laws. Career opportunities are emphasized in each area. [B] (Fa,Sp) 3 credits

HOSP 112: Sanitation and Safety

A study of sanitation and safety problems encountered in the foodservice industry, and controls and solutions to those problems. Moral, legal and economic aspects of food protection problems and solutions are discussed. The National Restaurant Association's Applied Foodservice Sanitation Certification Exam will be offered during this course. Prerequisite: eligibility for ENG 111. [B] (Fa,Sp) 3 credits

HOSP 115: Basic Baking and Pastry Arts

An introduction to baking and pastry with intensive hands-on laboratory training in a quantity food environment. This course concentrates on the production and quality control of baked goods. Laboratory classes emphasize basic ingredients and production techniques for breads, rolls, batters, cookies, pies, basic cakes, and decorations. Class: 1 hour per week. Laboratory: 3 hours and 30 minutes per week. Prerequisite: eligibility for MATH 101 or MATH 098 taken concurrently. [B] (Fa,Sp) 3 credits

HOSP 120: Decorative Work and Display Pieces

A laboratory course in the principles, techniques and materials of sculpture (ice, tallow, salt dough etc.) for buffet presentation and culinary salon artistic competitions and shows. The course includes theory and practice of artistic culinary design principles. [B] (Fa) 1 credit

HOSP 125: Introduction to Food Store Systems

An introduction to the food store business with a focus on structure, department identification and function, department interdependence, personnel, the role of management, marketing and merchandising, and future direction. (O) 3 credits

HOSP 171: Introduction to Casino Hotel Management

Casino/gaming operations are structured and managed differently from other hotel operations. This course discusses the management structure of casinos; the rules and regulations that affect day-to-day operations; government restrictions; the clientele; pari-mutuel wagering; marketing strategies; Native American gambling establishments; legislation concerning the size and types of games permitted; international casino and gaming trends; and the legality of opening a facility. Casinos are complex and unique entities; this course examines the keys to successful operations. [B] (O) 3 credits

HOSP 202: Introduction to Beverage Management

A study of the history, manufacture and sale of wines, brewed beverages and distilled spirits. Special emphasis is given to responsible use of these products through Training for Intervention Procedures by Servers of Alcohol (TIPS), a nationally recognized certification program. Legal and social issues involving alcohol are also explained. [B] (Fa) 3 credits

HOSP 203: Food Controls and Purchasing

A theoretical and practical approach to the various aspects of food and beverage cost control and purchasing. Includes a computer application model for foodservice management programs based on the C-BORD Menu Development Software System. Prerequisite: C- or better in ACCT 101. [B] (Fa) 3 credits

HOSP 205: Advanced Cake Decorating

An advanced course in methods of cake decorating. Students will learn to work in advanced sugar and decorating mediums. [B] (O) 2 credits

HOSP 210: Buffet Catering and Garde Manger

Students experience artistic production such as ice carving, platter presentation and garnishing while participating in on-campus community service catered functions. Class: 1 hour per week. Laboratory: 5.5 hours per week. Prerequisite: C- or better in HOSP 102. [B] (Fa,Sp) 4 credits

HOSP 212: Equipment, Design and Layout

Simple drafting procedures are used to lay out basic floor plans and simple evaluations of project drawings. Students are taught to interpret architectural plans. The selection of equipment and the making of applicable scale templates are part of the term project in which each student designs his or her own operation. Prerequisite: C- or better in HOSP 102. [B] (Sp) 3 credits

HOSP 214: Hospitality Human Resource Management

A course in managing people, including recruiting, training, motivating and supervising. Forecasting, staff planning and payroll controls are included. Emphasis is on the supervisor from the standpoint of his or her effectiveness in motivation, communication and productivity. Prerequisite: C- or better in HOSP 111. [B] (Sp) 3 credits

HOSP 215: Advanced Baking and Pastry Arts

This course focuses on the preparation of advanced pastries and classical desserts which include the preparation of petit fours, cake decoration and calligraphy, sugar and chocolate work, ice cream and show pieces. The course objectives also include the preparation of pralines, candies and speciality items. Laboratory classes are complemented with baking and pastry arts related studies that introduce management operations and procedures in the baking profession. Class: 1 hour per week. Laboratory: 3 1/2 hours per week. Prerequisite: C- or better in HOSP 115. [B] (Fa,Sp) 3 credits

HOSP 217: International Foods

Full-course, ethnic menus are planned, prepared and served by student teams. Emphasis is on organization, showmanship and supervision. Students will provide both oral and written reports on the menu presentations including food and labor costs, product and production analysis, and menu presentation and delivery. Class: 1 hour per week. Laboratory: 5 1/2 hours per week. Prerequisite: C- or better in HOSP 102. [B] (Fa,Sp) 4 credits

HOSP 231: Consumer Research and Marketing

A course to familiarize students with hospitality sales practices used in restaurants, hotels and clubs, from market analysis to actual sales activity. The course includes guest lectures, term projects, and voluntary membership in the Hotel Sales Management Association. Prerequisite: C- or better in HOSP 111. [B] (Fa) 3 credits

HOSP 232: Convention Sales and Services

This course offers a practical insight into the different types of conventions and meetings, the various types of organizations that stage such events, and the people they represent. Students are introduced to product and supplier specifications and selection. Different techniques and strategies used to target various markets are determined. This course also includes how to analyze a hotel property to determine which segments of the market may be sold to successfully and how to organize a staff to go after that business. [B] (O) 3 credits

HOSP 241: Hotel Management Procedures

Management techniques used in all phases of hotel-motel management are studied, including front office procedures, housekeeping, public relations, food and beverage problems, and control procedures. [B] (Sp) 3 credits

HOSP 260: Relationship Marketing

The purpose of this course is to give the student a solid foundation in customer service systems. Students will learn concepts and skills necessary to perform effectively in a customer driven service economy. This course will focus on

the concepts and applications of communications, strategic planning, teamwork, coaching, and vision building, as well as an introduction to Total Quality Management. This course emphasizes the importance of development and retention of repeat customers and business buyers. Class 3 hours per week. [B] (Sp) 3 credits

HOSP 270: Cooperative Education/Work Experience

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including corporations, institutions, restaurants, hotel and conference settings. Prerequisites: 12 completed credit hours in a Hospitality Careers program. (Fa,Sp,Su) 3 credits. *Please refer to page 19 for more information and general prerequisites for Cooperative Education/Work Experience.*

HOSP 295: Supporting People with Disabilities in the Hospitality Industry

This course is designed to provide foodservice students with the appropriate skills needed to train individuals with special needs in foodservice occupations. Emphasis is on teaching strategies, training techniques, understanding behavior management, task analysis, and work adjustments for learners with special needs as they relate to foodservice operations. Class: 1 hour per week. Laboratory: 5 hours per week. Prerequisite: C- or better in HOSP 102. [B] (Fa,Sp) 4 credits

Human Services**HS 101: Introduction to Human Services**

Course includes history of the human service movement, introduction to current theory and knowledge related to human services, and survey of contemporary helping professions. Class: 3 hours per week. [S] (Fa) 3 credits

HS 105: Human Abuse: An Introduction to Issues in Child Abuse

This course will provide an overview of the impact of abuse on children including the warning signs that may signal abuse and the profiling of potential abusers. Class: 3 hours per week. [O] (Fa) 3 credits

HS 152: Work With Individuals and Families

An introduction to current knowledge and theory related to understanding basic human needs. Theory and classroom practice of the interactional skills needed in the helping professions: assessment, planning, contracting, interventions, interviewing and evaluation is studied. Self-awareness regarding personal values and professional ethics is developed. Class: 3 hours per week. Prerequisite: HS 101 or 6 credits in psychology. (Sp) 3 credits

HS 201: Work with Groups

Current group theory, knowledge, methods and skills are covered that lead to beginning competence in helping people behaviorally change through group experience. Class: 3 hours per week. Prerequisites: HS 101 or employment in a human service position. (Fa,Sp) 3 credits

HS 252: Work with Agencies and Communities

An introduction to the study of human service organizations. The skills, methods, and functions of human service providers are explored, developed, analyzed, presented and integrated into the overall learning experience of the students. Through the utilization of group process, students will develop and present a grant proposal. Class: 3 hours per week. Prerequisites: HS 101, 152, 201 and 291. (Sp) 3 credits

HS 291: Human Services Field Experience I

120 hours of supervised field work in a cooperating human service agency. Attendance is required at weekly pro-seminar meetings. Prerequisites: HS 101, HS 152 and permission of coordinator. HS 290 for disabilities specialist students. (Fa) 3 credits

HS 292: Human Services Field Experience II

120 hours of supervised field work in a cooperating human service agency. Attendance is required at weekly pro-seminar meetings. Prerequisites: HS 101, HS 152, HS 201, HS 291 and permission of coordinator. HS 290 for disabilities specialist students. (Sp) 3 credits

Humanities**HUMN 101: Introduction to the Humanities**

An interdisciplinary course that examines the interplay of the humanities and society from a multicultural perspective. Emphasis is on the interactions of the arts (literature, music, painting, theatre) with the personal and social issues of one's culture and of other cultures. Class: 3 hours per week. A field trip is possible. Prerequisite: ENG 111 or permission of instructor. [H,L] (Fa,Sp) 3 credits

HUMN 110: Performance Skills

Personal growth course in effective communication skills in the performing arts and job-related presentations. Students will learn to focus energy to overcome performance anxiety and project more ease in professional, business and social situations. Fees for performance skills lessons are in addition to regular tuition and are arranged between student and teacher. Class: 3 hours per week. Prerequisite: permission of instructor. [H,L] (O) 3 credits

HUMN 201: Harlem Renaissance

Students will explore and experience the incredible surge of creative activity in literature, music, the visual and performing arts by African Americans in the 1920s. Class: 3 hours per week. Prerequisite: ENG 111 or permission of the instructor. [H,L] (O) 3 credits

Japanese**JPNS 101: Elementary Japanese I**

An introduction to spoken and written Japanese language and culture. Emphasis is on communication through development of skills in conversation, reading, and writing (*Hiragana*) based on the principles of Japanese grammar and pronunciation. No previous knowledge of Japanese is required. Class: 3 hours per week. Laboratory: 1 hour per week. [H,L] (Fa) 3 credits

JPNS 102: Elementary Japanese II

This course is the second half of Elementary Japanese. Practice in conversation, reading, and writing *Hiragana* and *Katakana* with the study of Japanese grammar and pronunciation as tools for communication. Class 3 hours per week. Laboratory: 1 hour per week. Prerequisite: JPNS 101. [H,L] (Sp) 3 credits

JPNS 201: Intermediate Japanese I

A third semester course in spoken and written Japanese and the culture of Japan. Emphasis on communication through development of skills in conversation, reading, and writing based on the principles of Japanese grammar and pronunciation. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisites: JPNS 101 and JPNS 102, or two years of high school Japanese, or permission of the instructor. [H,L] (Fa) 3 credits

JPNS 202: Intermediate Japanese II

A fourth semester study of spoken and written Japanese and the culture of Japan. Continued instruction in communication through development of skills in conversation, reading, and writing based on the principles of Japanese grammar and pronunciation at the intermediate level. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisite: JPNS 201, or three years of high school Japanese, or permission of the instructor. [H,L] (Sp) 3 credits

Legal

All paralegal courses require students to be eligible for ENG 111, or permission of instructor, as a prerequisite for enrollment.

**LEGL 109: Introduction to Paralegalism
(See POL* 120: Introduction to Law)****LEGL 110: Legal Ethics and Professional Responsibility**

Introduces students to the paralegal profession and the basic ethical principles which regulate those working in law, placing special emphasis on how the rules affect paralegals. Regulation of attorneys and unauthorized practice of law is discussed with reference to permitted paralegal tasks. Critical issues such as conflicts of interest, confidentiality, competence, and financial matters are emphasized. Students will become familiar with the law affecting lawyers and legal assistants, including the American Bar Association Rules of Professional Conduct, and guidelines and codes adopted by bar and paralegal professional organizations. [B] (Fa,Sp) 1 credit

LEGL 112: Legal Research

Provides an understanding of the basic tools of legal research. Students will become familiar with the use of the law library, examining primary and secondary authorities and law-finding tools. Research procedural methods are advanced through case examples and problem-solving techniques. Research findings are reported in legal memoranda. An off-campus law library must be used. Prerequisite: LEGL 109 Introduction to Paralegalism. [B] (Fa,Sp) 3 credits

LEGL 120: Legal Writing

Introduces the paralegal student to a variety of writing tasks, including drafting of correspondence, documents, pleadings, memoranda and appellate briefs. Communication skills will be improved through exercises to develop direct, clear and concise writing. Emphasis is given to analysis of relevant authority and constructing arguments. Use of formbooks and sample documents will be included. [B] (O) 3 credits

LEGL 205: Administrative Law

Presents a basic understanding of legal concepts affecting public administrative agencies, including the way in which administrative agencies fit into the United States system of government, delegation of authority and separation of powers, the types and organization of administrative agencies, sources of administrative law, rule making, legislative oversight, agency actions, controls on agencies, appeals, adjudications, judicial review, and legal ethics. Specific areas of agency action are explored, which include environmental law, Social Security, civil rights, immigration law, and Workers' Compensation. [B] (O) 3 credits

LEGL 207: Real Estate Transactions

Examines basic principles of real property law, with an emphasis on the role of paralegals in residential real estate transactions. Areas studied include acquisition of real property and fixtures, surveys and legal descriptions, co-ownership, easements and other encumbrances, marketable record title and title insurance, brokers, sales contracts, mortgage financing, and closing procedures. Students gain practical experience through document preparation, and familiarity with land records through assignments. Ethical issues related to this practice area are discussed. [B] (Sp) 3 credits.

LEGL 211: Business Organizations

Provides an introduction to and understanding of the basic principles of law that apply to the formation of different business organizations—sole proprietorship, general partnership, limited partnership, LLC, LLP, and corporation—for the paralegal. Students will be taught legal concepts regarding the scope and skills needed in the formation and operation of these business

forms. Familiarity with legislation, legal terminology, legal ethics, and legal requirements will be stressed. Practical applications and drafting of necessary documents and forms will be included. [B] (Fa) 3 credits.

LEGL 212: Introduction to Bankruptcy Law & Practice

Provides an introduction to and understanding of basic bankruptcy practice and procedure for the paralegal. Students are taught the basic legal concepts, legal ethics, and skills which are needed in a bankruptcy practice. Familiarity with the federal bankruptcy courts, the role of the trustee, and the fundamental goals, procedures, documents and forms of Chapters 7, 11, and 13 of the United States Bankruptcy Code will be stressed. Students will be introduced to both federal and state legislation impacting bankruptcy. Practical applications and drafting of necessary documents and forms will be included. Prerequisites: LEGL 211 or BUS 102. [B] (O) 3 credits.

LEGL 215: Environmental Law

Provides an introduction to and a basic understanding of environmental law for the paralegal. Students will be taught basic concepts regarding both national and state environmental laws. Familiarity with legislation, legal terminology and legal requirements in the area of environmental law will be stressed. Practical application will be presented. [B] (O) 3 credits.

LEGL 220: Computer Applications in Law

Provides the paralegal student with a background in computer applications in the law office. The student will be exposed to Microsoft Office Suite applications, as well as specialized legal software, such as Abacus, Timeslips, and Summation, in order to perform billing and calendar functions, file management, legal document preparation, and financial computations. The student will learn to access public records, governmental information and court forms using the Internet. The student will perform legal research using Westlaw and Lexis-Nexis. Prerequisite: Students without a strong foundation in computer applications should take CIS 111 Introduction to Computers or BOT 130 Microsoft Office Suite Applications. [B] (Fa,Sp) 4 credits

LEGL 221: Litigation

Provides the student with a basic understanding of the civil litigation process as preparation for employment as a paralegal. The course surveys and reviews the civil litigation process in state and federal courts, including the form and content of documents used in instituting or defending civil lawsuits. Students will be taught legal concepts and skills necessary to work as a litigation paralegal. Emphasis is given to court and office procedures before, during, and after trial, including causes of action and remedies, lawyer and client relationships and ethics, discovery, pleadings, organization of evidence, juries and verdicts; structure of a civil trial; post-trial motions; judgments; appeals, settlements, releases, and dismissals; and arbitration and mediation. [B] (Fa,Sp) 3 credits

LEGL 222: Family Law

Provides an introduction to and basic understanding of family law and practice for the paralegal. Students will be taught legal concepts regarding the scope and skills needed in a family law practice. Familiarity with legislation, legal terminology, and legal requirements in the area of family law will be stressed. Topics covered will include family law research, ethics, interaction with the client, premarital agreements, ceremonial and common law marriages, annulment, separation, dissolution of marriage, child custody, child support, tax consequences, legal rights of women and men, legal status of children, adoption, and surrogacy. Practical applications and drafting of documents will be included. [B] (O) 3 credits

LEGL 225: Trial Techniques

Provides in-depth involvement, academically as well as practically, in various aspects of courtroom experience through active, graded classroom

participation. The rules of evidence are examined through the study of various legal problems. Ability to organize facts and legal issues and to develop logical legal arguments is emphasized. Concentration is given to proper courtroom demeanor and advocacy skills. An American Mock Trial Association case problem is used in this course. Students learn to analyze the given facts and legal issues within the problem and develop logical legal arguments. Students learn to identify what additional information is necessary to understand and present the case and how to find it. [B] (Fa) 3 credits

LEGL 226: Mock Trial Practicum

Provides in-depth involvement in various aspects of the courtroom experience. Selected students become role players in a national competition involving a mock scenario. Students are supplied a complex legal problem. Fact analysis and development of logical legal arguments are undertaken, and students prepare and present both sides of a case, competing against other colleges in the American Mock Trial Association Tournament. Students prepare demonstrative and illustrative evidence for the trial. Students develop legal analytical and communication skills in the academic as well as practical aspects of courtroom procedure which will help them assist an attorney before and during trial. Prerequisite: Students must try out during the previous semester and be selected for the American Mock Trial Association team. This course requires weekend availability of team members. Not available to students with a baccalaureate degree who are seeking or have earned a professional or graduate degree. [B] (Sp) 3 credits.

LEGL 231: Wills, Trusts, and Estate Administration

Provides a basic understanding of the fundamental principles of law and legal terminology relating to the control and disposition of property before and after death, the probate court system and the probate process. Students will be taught basic concepts concerning wills, trusts, probate administration, estate and gift taxation, and fiduciary accounting. Responsibilities, ethical considerations, and duties of the paralegal in the handling of an estate will be stressed. Students will gain practical experience through exposure to document preparation, file management, and preparation of forms for estate administration. [B] (Fa) 3 credits

LEGL 270: Cooperative Education/Work Experience

Provides students with the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings related to the program of study, including private law firms, corporate legal departments, government or other settings in which practical experience may be gained. In addition to site placement (150 hours for unpaid internships; 300 hours for paid placement), students attend seminars focusing on job-related interpersonal skills, such as values and preferences, time and stress management, communication skills, conflict management, corporate culture, new employee orientation, performance evaluations, business ethics, leadership, and career advancement. Job search strategies are discussed and practiced. Prerequisites: 12 completed credit hours in the Paralegal program and permission of instructor. Students work with the Cooperative Education Director during the semester before enrollment to secure an appropriate site placement. [B] (Fa,Sp,Su) 3 credits. *Please refer to page 19 for more information and general prerequisites for Cooperative Education/Work Experience.*

Manufacturing

CAD 101: Computer-Aided Design I (AutoCAD)

An introduction to the techniques of generating graphic images with computers. Topics include: overview of CAD technology, computer technology, hardware descriptions and requirements, file manipulation and management, two- and three-dimensional geometric construction, symbol library creation, dimensioning, scaling, sectioning, plotting, detail and assembly drawing including tolerance studies. Class: 3 hours per week. (Fa,Sp) 3 credits

CAD 102: Computer-Aided Design II (AutoCAD)

A continuation course in industrial drafting concepts using a CAD system, specifically oriented towards the design of machine tool tooling, fixtures and gages. Class: 3 hours per week. Prerequisite: CAD 101. (Fa,Sp) 3 credits

CAD 103: Computer-Aided Design I (CADKEY)

An introduction to the techniques of generating graphic images with computers. Topics include: overview of CAD technology, computer technology, hardware descriptions and requirements, file manipulation and management, two and three-dimensional geometric construction, symbol library creation, dimensioning, scaling, sectioning, plotting, detail and assembly drawing including tolerance studies. Class: 3 hours per week. (Fa,Sp) 3 credits

CAD 105: Parametric Design-Pro/ENGINEER

An introduction to parametric design utilizing the Pro/ENGINEER software technology. A continuation of solid modeling concepts. Class: 3 hours per week. Prerequisite: CAD 102. 3 credits

CAM 101: Computer-Aided Manufacturing

An introductory course in the utilization of computer technology for the planning, implementation and control manufacturing processes. The process of manual and automated preparation of computer-aided manufacturing systems programs and equipment are studied in preparation for implementing these techniques in a computer-integrated manufacturing environment. This will be accomplished through numerical control programming (CNC) and CAD/CAM interface. Class: 3 hours per week. Prerequisites: MFG 111, CAD 101. (Fa) 3 credits

MFG 111: Manufacturing Materials and Processes I

An introduction to the basic principles on which manufacturing processes are based, and to the basic materials produced by or used in these processes. Topics include: the basic processes in manufacturing metals, testing or engineering materials; ferrous and non-ferrous metals and alloys; fundamental metal-casting, molding and heat treating processes; non-metallic materials; metal cutting, forming, welding and joining; metal machining processes; and quality control measurement and inspection. Class: 3 hours per week. Prerequisite: MATH 115 (may be taken concurrently). (Fa) 3 credits

MFG 112: Manufacturing Materials and Processes II

A continuation of MFG 111 - Manufacturing Materials and Processes I - with emphasis on metal machining and fabrication technologies, numerical control machining, tooling and fixture design and manufacture, and advanced metals machining technologies and concepts. Class 3 hours per week. Prerequisite: MFG 111. (Sp) 3 credits

MFG 113: Production Control

A basic course in the planning and scheduling of manufacturing production activities. Class 3 hours per week. (Fa) 3 credits

MFG 114: Plant Layout

A course in plant layout as practiced in modern industry. Analysis is made of the procedures used in placing equipment, organizing efficient machine-operator patterns and servicing of machines. Time is devoted to practical work on actual layout problems, including integrated production lines, using tools such as layout templates, three-dimensional models, man-machine charts and process flow charts. The relationship of work standards, methods and layout inspection, production control and maintenance is also discussed. Class: 3 hours per week. Prerequisite: MFG 111. (Fa) 3 credits

MFG 115: Fundamentals of Tool Design

A basic course in the fundamentals, principles, practices, tools, theories and commercial standards of single point, jig, fixture and die design. Included is theory in the design of metal cutting tools and individual products and design

work. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: MFG 112, MATH 116, CAD 101. (Fa) 4 credits

MFG 116: Hydraulics I

An introduction to the basic principles involved in machine tool hydraulic systems. Topics include: the study of the transmission, application and control of oil fluid power, the basic components used in hydraulic component arrangement in various fluid circuit design. Class: 3 hours per week. Prerequisites: ENGR 121, MATH 116. (Fa) 3 credits

MFG 117: Hydraulics II

A continuation of MFG 116 - Hydraulics. Topics include: the selection, installation, maintenance and trouble shooting of fluid power components and systems used in machine tools, including electrohydraulic servosystems. Class: 3 hours per week. Prerequisite: MFG 116. (Sp) 3 credits

MFG 118: Vacuum Systems and Pneumatics

An introduction to the pneumatic and vacuum systems used in machine tools and machining centers. Topics covered include the proper selection, installation, maintenance and trouble shooting of pneumatic and vacuum systems used in machine tools. Class: 3 hours per week. Prerequisites: ENGR 121, MATH 116. (Sp) 3 credits

MFG 119: Productivity Improvement

This course deals scientifically with analytical and creative problems affecting time management. Topics include: the principles of methods, design and work measurement; motion study techniques and the establishment of time standards. Applications to product design, machine and tool design, process planning, production scheduling, plant layout, budgeting, sales prices, manpower requirements, wage incentives and methods of improvements are studied. Class: 3 hours per week. Prerequisites: MFG 111, MFG 113, MFG 114. (Sp) 3 credits

Mathematics**MATH 098: Mathematical Modeling I: Number Sense & Geometry**

This course is designed to enhance the student's mathematical literacy so that he/she will be prepared to deal effectively with a variety of practical problems. Topics include: interpretation and analysis of charts and graphs; geometry and measurements; estimation and reasonableness of answers, applications using ratios, proportions, percents and decimals; properties of the whole, integer, and rational numbers and operations on the real numbers; and solutions of equations. A review of the operations and fundamental concepts of arithmetic and geometry will be imbedded in and connected to real world problem situations. A TI-83 graphing calculator is required. Class: 3 hours per week. Prerequisites: placement by mathematics assessment test and eligibility for ENG 098. (Fa,Sp,Su) no credit

MATH 100: Number Sense, Geometry and Algebraic Concepts

This innovative course satisfies the requirements for both MATH 098 and MATH 101 in a single semester. The course will provide the student with enhanced mathematical literacy in arithmetic, geometric, and algebraic concepts while strengthening and building problem solving and reasoning skills. Topics include: interpretation and analysis of charts and graphs; geometry and measurements; estimation strategies; ratio and proportion; percents and decimal numbers; properties of the whole numbers, integers, rationals and reals; operations of the real numbers; use of variables, equations and graphs to interpret problems in symbolic form; properties and theorems of the real number systems to solve linear, quadratic, rational, and literal equations; linear systems; and integer exponents. Practical problem applications and graphing calculators will be fully integrated into the course. A TI-83 graphing calculator is required for the course. Prerequisites: placement by mathematics assessment test, and

eligibility for ENG 098. (It is recommended that students consult with either the Mathematics Department or their advisor.) (Fa,Sp) 3 credits

MATH 101: Mathematical Modeling II: Algebraic Concepts

A first course in mathematical modeling using variables, equations, and graphs designed to develop students' ability to encode and interpret practical quantitative problems in symbolic form. The course includes all of the basic properties and theorems of the real number system that are required to solve linear, quadratic and selected rational equations. Linear systems, basic graphing, integer exponents and selected literal equations are included. Elementary geometric concepts are used throughout. A TI-83 graphing calculator is required and fully integrated into the course. Class: 3 hours per week. Prerequisites: eligibility for ENG 111, and B- or better in MATH 098 or placement by mathematics assessment test. *No credit if already completed MATH 100 or a higher numbered math, except MATH 110.* (Fa,Sp,Su) 3 credits

MATH 102: Mathematical Modeling III: Advanced Algebraic Concepts

A second course in mathematical modeling whose main themes are functions, represented by table, graph and rule, and problem solving. Polynomial functions with special attention to linear, quadratic and power functions; rational with attention to the reciprocal function; square root, absolute value, piecewise and exponential functions are studied. A TI-83 graphing calculator is required and used throughout. Class: 3 hours per week. Prerequisites: C or better in MATH 100 or MATH 101, or placement by mathematics assessment test. C or better in ENG 111 (recommended) or concurrent registration in ENG 111 (acceptable). *No credit if already completed MATH 120 or any higher numbered math course.* [N] (Fa,Sp,Su) 3 credits

MATH 105: Trigonometry

A brief review of sets, relations, functions, and inverses. Topics include trigonometry of the right triangle, solutions of triangles, the trigonometric functions, the circular functions, identities, solving trigonometric equations, graphs, inverse trigonometric functions, polar coordinates and vectors. Emphasis is on an analytic approach. Class: 2-3⁺ hours per week. Prerequisite: MATH 102 or placement by mathematics assessment test. Recommended: MATH 109 or high school geometry. *The 3-credit MATH 105, required for all students enrolled in the technology Pathways Program, includes a 1 hour per week laboratory including introduction to scalars and vectors, geometric and algebraic methods of vector addition in a plane and IBM PC laboratory problems to enhance the lecture part of the course. [L,N] (O) 2-3 credits

MATH 106: Elements of Modern Mathematics

An introduction to contemporary mathematics for students of science, social science and the liberal arts. Topics may include: sets and deductive reasoning, inductive reasoning, logic, counting techniques, social choice and decision making, management science and the nature of geometry—growth and symmetry. Applications are considered throughout. A TI-83 calculator is required. Class: 3 hours per week. Prerequisites: C or better in MATH 102 or placement by mathematics assessment test, and C or better in ENG 111. [L,N] (Fa,Sp) 3 credits

MATH 108: Elementary Statistics

An introduction to statistical theory and its applications. The use of statistics as a decision-making tool will be discussed. Topics include: data collection, organization and summarization, measures of central tendency and variation, counting techniques, introductory probability theory, discrete and continuous probability models, normal distribution theory, sampling distributions, confidence interval estimation and hypothesis testing in the one sample case. A group project which will include the design of a survey, collection, analysis of data and presentation of the results is required. A statistical calculator is required and will be used throughout. Class: 3 hours per week. Prerequisite: MATH 101 or placement by mathematics assessment test or MATH 110. The

department recommends a C or better in the prerequisite course. A student cannot receive credit for MATH 108 if credit has already been received for MATH 111. Students planning to transfer to a four-year institution with a freshman statistics 4 credit requirement should take MATH 111 instead of MATH 108. [L,N] (O) 3 credits

MATH 109: Geometry

A foundation course in Euclidean geometry using an axiomatic approach recommended especially for physical science and engineering majors who have not had a formal geometry course. Topics include: inductive and deductive reasoning; logic; polygons; parallelism; congruence; similarity; coordinate geometry; direct, indirect and coordinate proof; three-dimensional space; and a brief introduction to non-Euclidean geometries. As appropriate, computer software is used to encourage exploration and formulation of hypothesis. Class: 3 hours per week. Prerequisites: C or better in ENG 111 (recommended) or concurrent registration in ENG 111 (acceptable) and C or better in MATH 102 or B+ or better in MATH 100 or MATH 101 or placement by mathematics assessment test. [L,N] (Fa,Sp) 3 credits

MATH 110: Quantitative Literacy

Selected topics in mathematics chosen to satisfy the General Studies program requirement in mathematics. A course designed to demonstrate the fundamental nature of mathematics and its applications in modern life through a non-algebraic introduction to the concepts of statistics. Topics include random sampling, design of surveys and experiments, information from samples, confidence intervals, elementary probability, examining numbers and data critically, graphing and data analysis, written discussion of numerical analysis, and simulation. A TI-30 XlIs or TI-83 calculator is required. Applications considered throughout. Prerequisites: C or better in MATH 098 or placement by mathematics assessment test and C or better in ENG 098. May not be taken for credit if credit already received for MATH 111. [L,N] (Fa,Sp) 3 credits

MATH 111: Elementary Statistics with Computer Applications

An introduction to statistical theory and its applications. The use of statistics as a decision-making tool will be discussed. Topics include: data collection, organization and summarization, measures of central tendency and variation, counting techniques, introductory probability theory, discrete and continuous probability models, normal distribution theory, sampling distributions, confidence interval estimation and one sample hypothesis testing. A group project which will include the design of a survey, collection analysis of data and a presentation of the results is required. A statistical calculator is required and will be used throughout. Applications of statistical techniques in a variety of disciplines will use the Minitab Statistical Software Package. Class: 4 hours per week. Prerequisites: C or better in MATH 102, or C or better in both MATH 101 and MATH 110, or C or better in MATH 100 and MATH 110, C or better in ENG 111. A student cannot receive credit for MATH 111 if he/she has already received credit for MATH 108. [L,N] (Fa,Sp,Su) 4 credits

MATH 113: Structure of Mathematics I: Number Systems

A course designed for students planning to be certified in Early Childhood Education, Elementary or Middle School Level Education (grades 4-8). A study of the real number system that stresses conceptual understanding of the basic operations and their applications. Topics include an examination of whole numbers, integers, and rational and irrational numbers with an emphasis on place value and the associated operations. Topics from numeration systems, number theory, and set theory will be developed as needed. Problem-solving strategies will be developed and integrated throughout. In order to develop and illustrate concepts, manipulatives and technology will be used where appropriate. A Texas Instruments "Math Explorer" is required, or, for those planning to teach middle school, a TI-80. Prerequisites: Grade of C or better in MATH 102 or placement by mathematics assessment test, and C or better in ENG 111. [L,N] (F,S) 3 credits

MATH 114: Structure of Mathematics II: Geometry

This is the second of mathematics courses required for students planning to become certified elementary or middle school teachers. Emphasis will be on concepts of geometry and the development of spatial reasoning and geometric modeling to solve problems. Measurement, coordinate geometry, similarity and transformations will also be studied. Students will use a dynamic geometry system and explore the world wide web for materials appropriate for elementary school students. An informal introduction to probability will be included. Prerequisites: C or better in MATH 102, and a C or better in ENG 111. 4 credits

MATH 115: Technical Mathematics I

A first course in technical mathematics with an emphasis on the application of algebraic and geometric techniques and principles to the solution of problems in industrial technology. The course is designed to develop and enhance the students' mathematical skills through presentation of relevant technical situations, and an integrated development of graphic, algebraic and geometric models and solution methods. A TI-83 or TI-86 graphing calculator is required and is used throughout. Prerequisite: placement by mathematics assessment test or a grade of C or better in MATH 102 and C or better in ENG 111. (Fa) 3 credits

MATH 116: Technical Mathematics II

A second course in technical mathematics with an emphasis on the application of trigonometry and algebraic techniques and principles to the solution of problems in industrial technology. The course is designed to develop and enhance the students' mathematical skills through presentation of relevant technical situations, and an integrated development of graphic, algebraic and trigonometric models and solution methods. A TI-83 or TI-86 graphing calculator is required and used throughout. Prerequisites: C or better in MATH 115, or placement by mathematics assessment test. Recommended MATH 109 or high school geometry. (Sp) 3 credits

MATH 120: Topics in Modern Mathematics I: Functions, Graphs, Matrices

A course in selected topics from contemporary mathematics with applications for students in business, economics, and social science. Topics include: the concepts of function and rate of change, a review of algebraic and graphical aspects of polynomial functions, a study of exponential and logarithmic functions, mathematical modeling, and operations on systems of linear equations including matrix operations. A TI-83 graphing calculator is required and used throughout the course. Class: 3 hours per week. Prerequisite: C or better in MATH 102 or placement by mathematics assessment test, and C or better in ENG 111. [L,N] (Fa) 3 credits

MATH 121: Topics in Modern Mathematics II: Applied Calculus

A course in selected topics from calculus with applications in business, economics, and social science. Students will learn the fundamental concepts of calculus and how to apply them to real-life problems. A major goal is to develop conceptual understanding (rather than algebraic manipulation) through the use of graphing calculators and through the consideration of graphical, numerical and algebraic perspectives. The major conceptual focus is on rates of change and their interpretations within a problem context. The definition of the integral, the Fundamental Theorem of Calculus, some selected applications of integration and some integration techniques are included. A TI-83 graphing calculator is required and used throughout. Class: 3 hours per week. Prerequisite: C or better in both MATH 120 and ENG 111. [L,N] (Sp) 3 credits

MATH 130: Applied Calculus

A survey of the major concepts of calculus with emphasis placed on applications in the managerial and the social sciences. Topics include a brief review of functions and graphing, the concepts of limit, derivatives, and the fundamental theorem of calculus. Class: 3 hours per week. Prerequisite: MATH 102 or placement by mathematics assessment test. [L,N] (O) 3 credits

MATH 135: Elementary Mathematical Models—A College Algebra Course with a Liberal Arts Perspective

A course designed to convey a sense of the utility, power, and method of mathematics through genuine and understandable applications. Linear, quadratic, polynomial, exponential and logistic functions will be the major focus as these are most commonly encountered in other disciplines. Time permitting, rational and logarithmic functions will also receive attention. Each model will be introduced with an application that is first analyzed using difference equations, followed by the algebraic review/extension needed to move to a study of function family that is the solution of the difference equation. Numerical, graphical and analytic methods will be employed throughout; the course focus is on discrete and continuous models of growth. The course will end with a brief examination of the chaotic behavior that can occur in logistic models. A graphing calculator (preferably a TI-83) is required. Prerequisites: C or better in MATH 102 or placement by mathematics assessment test, and C or better in ENG 111. [N,L] (O) 3 credits

MATH 150: Precalculus Mathematics

A detailed study of relations and functions, operations on functions, and their graphs. Characteristics of various families of functions, modeling and solving application problems are the main focus of the course. In particular, exponential, logarithmic and circular functions along with polynomial, rational and selected algebraic families will be developed. A TI-83 or 86 graphing calculator is required and will be used throughout. Class: 4 hours per week. Prerequisite: a grade of C or better in MATH 102, or C or better in MATH 116, or placement by mathematics assessment test, and C or better in ENG 111. [L,N] (Fa,Sp,Su) 4 credits

MATH 188: Problems, Reading and Applications in Calculus

A supplemental problem-solving session dominated by problems that will direct attention more to ideas than to techniques. There will be some self-contained examples of applications of calculus that are tractable, relevant and interesting to students. Other problems will require imagination, outside reading and consultation, cooperation and coherent writing. Students will be required to defend both their methodology and their conclusion. Lastly, the readings along with the associated problems from the readings will provide some history of the discipline as well as how mathematics in general and calculus in particular has contributed to intellectual history. *May be taken up to two times as MATH 188 and MATH 189.* Prerequisite: concurrent registration in MATH 190 or MATH 192 and C or better in ENG 111. [L,N] (O) 1 credit

MATH 189: [L,N] (O) See MATH 188**MATH 190: Analytic Geometry and Calculus I**

A first course in calculus with analytic geometry for students in mathematics, science, engineering and technology. Topics include families of functions (including exponential and logarithmic) represented by table, graph and equation, modeling of actual data, the concepts of limit and continuity, the derivative and antiderivatives, the definite integral and the Fundamental Theorem of Calculus. Applications from mathematics, engineering, and economics will receive special attention. Solutions to such problems will require the use of a graphing calculator and/or a symbolic algebra system (Mathcad or Derive). A TI-86 graphing calculator is required. Prerequisites: C or better in MATH 150, or placement by mathematics assessment test, and C or better in ENG 111 (recommended) or concurrent registration in ENG 111 (acceptable). *Students cannot receive credit for MATH 190 if they have already received credit for MATH 191.* [L,N] (Fa,Sp) 5 credits

MATH 192: Analytic Geometry and Calculus II

A second course in Calculus and analytic geometry for students in mathematics, science, engineering and technology. Topics include antiderivatives, the definite integral, the Fundamental Theorem of Calculus, techniques of integration,

numerical approximation, methods of integration, separable differential equations, improper integrals, sequences and series, polar coordinates and parametric equations. Applications of these topics are used throughout the course and will include problems in area, volume, arc length and exponential growth and decay. (Estimation and approximation techniques are considered throughout the course and include methods for approximating solutions to equations, methods of numerical integrations, and the use of power series to approximate functions.) Solutions of these problems will require the use of graphing calculator and/or Derive software. A TI-86 graphing calculator is required. Prerequisites: C or better in ENG 111 (recommended) or concurrent registration in ENG 111 (acceptable) and C or better in MATH 190. [L,N] (Fa,Sp) 4 credits

MATH 201: Differential Equations

An introductory course in differential equations. Solution methods for differential equations including selected first order equations, nth-order equations, and systems of linear equations using matrix techniques, Laplace transforms, and numerical methods. Series techniques for selected linear differential equations including Bessel's equation will be considered. Computer software and/or graphing calculators will be integrated as appropriate throughout the course. Recommended for science and engineering students. Class: 4 hours per week. Prerequisites: MATH 192 and C or better in ENG 111. [L,N] (Sp) 4 credits

MATH 205: Structure of Mathematics III: Data Analysis

This course is the third in a sequence of three content courses for students who intend to become elementary or middle school teachers. It will concentrate on an examination of quantitative and categorical data. It will focus on how the presentation of data affects perception and understanding. Students will develop and use quantitative reasoning to critically examine data from surveys, experiments and studies. Integrated topics are used to formulate questions, collect, organize and display relevant data, and to select and use appropriate statistical methods to analyze data and evaluate statistical inferences. A formal study of probability is included. Technology as appropriate is integrated throughout. Class: 4 hours per week. Prerequisites: "C" or better in MATH 113 and 114, and "C" or better in ENG 111 or placement by English assessment test. [L,N] (Fa) 4 credits

MATH 208: Statistics II: Methods and Applications

Introduction to statistical research methods with applications to business, economics and social sciences. Emphasis on: statistical inference, hypothesis testing, correlation and simple linear regression and multiple regression, analysis of variance, nonparametric methods and Chi-square tests. The statistical software package, Minitab, will be used throughout the course. Class: 3 hours per week. Prerequisites: MATH 108 or MATH 111, C or better in ENG 111. [L,N] (Sp) 3 credits

MATH 220: Introduction to Linear Algebra

A first course in linear algebra for students in mathematics, science and engineering. Topics include: systems of linear equations, matrices, determinants, vectors and vector spaces, linear transformations, eigenvalues and eigenvectors. Applications will be considered with emphasis on numerical methods. Computers and/or graphing calculators will be integrated as appropriate. Class: 3 hours per week. Prerequisites: MATH 192 and C or better in ENG 111. [L,N] (Fa, odd years) 3 credits

MATH 250: Set Theory and Foundations

A formal introduction to the basic concepts of modern abstract mathematics. Topics include: symbolic logic, sets and relations, recursive and inductive procedures, functions, cardinality, algebraic structures, graph theory, and methods of proof. Class: 3 hours per week. Prerequisites: MATH 191 or MATH 190 and C or better in ENG 111. [L,N] (Sp, even years) 3 credits

MATH 293: Analytic Geometry and Calculus III

A course in multivariable calculus with analytic geometry for students of mathematics, science and engineering. Topics include: parametric equations, two-and three-dimensional vector algebra, vector differential calculus, differentiation of functions of several variables, multiple integrals, and line and surface integrals. Applications are considered throughout. Computer software and/or graphic calculators will be integrated as appropriate throughout the course. Class: 4 hours per week. Prerequisites: MATH 192 and C or better in ENG 111. [L,N] (Fa) 4 credits

Medical Laboratory Technician, see Clinical Laboratory Technology

Meteorology

MTEO 110: Introduction to Meteorology

An introduction to the principles of atmospheric behavior, with emphasis on atmospheric motion, general circulation, air masses and frontal systems, clouds and precipitation, and their relation to climate and weather formations. A field trip to a local weather bureau may be included. Class: 3 hours per week. [L,N] (Fa) 3 credits

Multimedia

MM 201: Introduction to Three-Dimensional Modelling

Students will learn to design and create in digital 3D space, changing flat art and images into shapes with solid volume. The course will cover basic 3D topics such as wireframe assembly, extruding and lathing, various approaches and techniques of lighting and shading, image and texture mapping and development of animation in the 3D space. Use and integration of 3D forms and animations with other multimedia software will also be covered. Class: 6 hours per week. Prerequisites: FA 210 or FA 211 or COMM 290 or permission of the instructor. (Fa) 3 credits

MM 202: Three-Dimensional Modelling II

This course will help the student elaborate on the 3D skills that were developed in MM 201. Students will work on longer, more involved projects either in 3D scene development or 3D animation. This course counts as a Computer Studio elective in the Multimedia Studies program. Class: 6 hours per week. Prerequisites: MM 201 or permission of the instructor. (Fa,Sp) 3 credits

MM 205: Digital Video/On-Line Editing

This course will introduce students to the discipline of digital video. All analog video will be digitized using a Macintosh computer and clips assembled into larger productions using on-line software such as Adobe Premiere and the Data Translation Media 100 editing suite. Topics will include scripting, analog digitizing, compression schemes, Quicktime movies, A/B roll composition, output to tape, special effects managing and sound design. Class: 6 hours per week. Prerequisite: COMM 176 or COMM 210 and FA 210 or FA 211 or COMM 290 or permission of instructor. (Fa,Sp) 3 credits

MM 206: Digital Video II

This course allows students to continue their training in computer-based video editing. Students will develop projects of their own design and learn to take a video project from the planning stages, through video shooting, to digitization and editing. This course counts as a Computer Studio elective in the Multimedia Studies program. Class: 6 hours per week. Prerequisite: MM 205 or permission of the instructor. (Fa,Sp) 3 credits

MM 245/CST 245: Web Page Design

Students will learn the fundamentals of designing, planning and producing web sites and pages for posting on the Internet. Image management and creation, information design, and animation creation and use are major topics. Emphasis will be on site design and management. Students will work with HTML code and a web page editor. Class: 6 hours per week. Prerequisites: FA 210, COMM 290 or permission of the instructor. (Fa,Sp) 3 credits

Music**MUS 111: History and Appreciation of Music I**

A survey of western music from medieval times through the baroque period, with an introduction to the concept of sound, melody, rhythm, harmony, texture and form. Emphasis will be given to major developments in polyphonic music along with the rise of vocal and instrumental compositions. Class: 3 hours per week. [H,L] (Fa) 3 credits

MUS 112: History and Appreciation of Music II

A survey of western music from the classical period to modern times with emphasis given to the major forms of composition as well as pieces that have literary or other non-musical associations. A review of music concepts such as sound, melody, harmony, rhythm and form. Class: 3 hours per week. [H,L] (Sp) 3 credits

MUS 113: Today's Music I: Traditional Folk, Latin, Country, Blues and Rock

A music appreciation course that examines the development of American music from its roots in Anglo, African, Native and Latin American styles to the evolved styles of country, blues, folk, rock "n" roll. Emphasis will be given to the impact of these earlier styles on contemporary practices.. Class: 3 hours per week. [H,L] (Fa) 3 credits

MUS 114: Today's Music II: Gospel, Ragtime, Blues, Jazz

An examination of the development of American music from its roots in the secular and sacred traditions of the late 1800's and their impact on the pre-jazz forms of ragtime, brass bands and blues to the jazz forms of swing, bebop, cool and fusion. Emphasis will be given to the stylistic characteristics of each form and their impact on current music styles. Class: 3 hours per week [H,L] (Sp) 3 credits

MUS 121, MUS 122, MUS 221, MUS 222: Chorus

Open to all students and members of the community. Course may be repeated up to four semesters as MUS 121, 122, 221, and 222. Class: 3 hours per week. [H,L] (Fa,Sp) 2 credits

MUS 123, MUS 124, MUS 223, MUS 224: Chamber Music/Jazz Ensemble

Instrumental performing groups of various kinds and sizes, depending on the students enrolled. Course may be repeated up to four semesters as MUS 123, 124, 223 and 224. Students must demonstrate technical proficiency on their instrument. Class: 3 hours per week. [H,L] (Fa,Sp) 2 credits

MUS 127, MUS 128, MUS 227, MUS 228: Vocal Ensemble: Madrigal

This course is designed to rehearse and perform sacred and secular music written for the smaller vocal group. Unlike Chorus, an audition is necessary to prepare the singer for the increased difficulty of the musical material in this course. Course may be taken for a total of 4 credits as MUS 127, 128, 227, and 228. Class: 1.5 hours per week. [H,L] (O) 1 credit

MUS 131, MUS 132, MUS 231, MUS 232: Private Music Lessons

Private vocal or instrumental lessons. Private teacher must be approved by the Liberal Arts Division. Fees for lessons are in addition to regular tuition and are arranged between student and teacher. Class: 1/2 or 1 hour per week.

Course may be taken for a total of 8 credits as MUS 131, 132, 231 and 232, all of which can run concurrently according to students' needs. May be taken for liberal arts elective credit. (Fa,Sp) 1 or 2 credits

MUS 201: Music Harmony and Ear Training I

Students will be introduced to tonal harmony and ear training. Topics will include diatonic harmonic procedures and voice leading principles. The ear training section of the course will develop listening skills, sight singing, rhythm and melodic dictation. Prerequisite: MUS 211 or permission of instructor. Class: 3 hours per week. [H,L] (Sp) 3 credits

MUS 202: Music Harmony & Ear Training II with Keyboard Lab

This is the second course in tonal harmony and ear training. In the music harmony section of the course, topics will include a further exploration of diatonic harmonic progressions, introduction of chromatic harmony and methods of modulation in four-part choral settings. The ear training section will offer further development in ear training skills through the sightsinging of melodies based on tonic, dominant, sub-dominant chords, melodic dictation and rudimentary harmonic dictation. The keyboard lab will provide students with the opportunity to apply harmonic skills and techniques to the piano keyboard. Prerequisite: MUS 201 or permission of instructor. Class: 4 hours per week. [H,L] (Fa) 4 credits

MUS 203: Music Harmony & Ear Training III with Keyboard Lab

This is the third course in tonal harmony and ear training. In the music harmony section of the course, there will be an emphasis on the use of skills acquired in MUS 211, MUS 201 and MUS 202 to analyze common musical forms from the 16th, 17th, 18th and 19th centuries. These forms will include binary, ternary, and early sonata allegro, dance suites, inventions, fugues, as well as minuetts, trio and early rondo forms. Forms covered will also include expanded sonata forms, concerto, waltz, nocturne and impressionistic forms. The ear training section will cover expanded exercises on the use of diatonic chords, diatonic melodic, harmonic and chromatic dictation. The piano keyboard lab will engage in the study and application of more complex chord forms (i.e., 9ths, 11ths, and 13ths), the use of open voicings, and more complicated accompaniment. Prerequisite: MUS 202 or permission of instructor. Class: 4 hours per week. [H,L] (Sp) 4 credits

MUS 211: Fundamentals of Music

As a beginning course in the theory of music, students will be introduced to the skills necessary to read, write and perform music, with basic training in pitch and emphasis on performance. Prerequisite: basic piano skills. Class: 3 hours per week. [H,L] (Fa) 3 credits

MUS 213: Music Theory and Composition I

Continuation of four-part writing through 13th chords and secondary 7ths. Intermediate study of jazz harmony, composition and instrumentation. Course meets at the Camerata Conservatory, Hartford. Class: 3 hours per week. Prerequisite: MUS 212 or equivalent. [H,L] (Fa) 3 credits

MUS 214: Music Theory and Composition II

Study of more complex four-part writing and jazz harmony, and analysis and writing using advanced harmonic and melodic materials. Course meets at the Camerata Conservatory, Hartford. Class: 3 hours per week. Prerequisite: MUS 213 or equivalent. [H,L] (Sp) 3 credits

MUS 215: Beginning Piano

Students will be introduced to the piano keyboard and will acquire basic skills in reading general music notation, music notation related to the piano and an understanding and application of basic chords. Students will also receive a foundation in music theory and appreciation. Highly recommended for Music Option students needing basic piano skills for MUS 211. Class: 3 hours per week. [H,L] (Fa,Sp) 3 credits

MUS 225: Keyboard Harmony I

The study of basic keyboard skills as well as accompaniment techniques. Emphasis on harmonic recognition, voice leading principles and sight singing skills. Course will include group activities as well as individualized instruction. Prerequisites: MUS 201 or permission of instructor and basic piano skills. Course meets at the Camerata Conservatory, Hartford. Class: 2 hours per week. [H,L] (Fa) 2 credits

MUS 226: Keyboard Harmony II

Continued the study of keyboard skills and accompaniments techniques. Emphasis on harmonic recognition, voice leading, and sight reading. Course includes group activities as well as individualized instruction. Course meets at the Camerata Conservatory, Hartford. Class: 2 hours per week. Prerequisite: MUS 225 or permission of instructor. [H,L] (Sp) 2 credits

MUS 241: Electronic Music I

The study of contemporary electronic music composition, technique, performance, and recording using synthesis, computer, sequencing and recording equipment. Prerequisite: MUS 211 or permission of instructor. [H,L] (O) 3 credits

MUS 251: Music History I: The Classical Period

A study of Western European music development from the early 18th century to the early 19th century. Topics will include: an overview of the transitional pre-classical period and its impact on the music and composers of the classical period, an analysis of the significant musical styles of the period, a biographical study of the key composers and the impact of the culture on the music development of the period. Prerequisite: eligibility for ENG 111. Highly recommended: MUS 111. [H,L] (Fa) 3 credits

Occupational Therapy Assistant

These courses are restricted to students accepted into the Occupational Therapy Assistant program. Permission from the program coordinator is required.

OTA 101: Introduction to Occupational Therapy

An overview of occupational therapy that describes the philosophy and theoretical foundation of the profession as well as the role of the occupational therapy assistant. Level I, observational experiences will be required. (Fa) 3 credits

OTA 102: Occupational Therapy with Children

An overview of disabilities and diseases that affect children, and the study of occupational therapy theory and practice as it pertains to the treatment of these disabilities. Prerequisites: OTA 101 and 120, BIO 112, and PSYC 124. (Sp) 3 credits

OTA 102L: Treatment Modalities Laboratory

A laboratory course in occupational therapy to complement OTA 102; must be taken concurrently with OTA 102. Laboratory: 2 hours per week. (Sp) 1 credit

OTA 106: Level I Advanced Fieldwork

A pass/fail course providing 20 hours of supervised fieldwork experience where the student applies treatment learned in OTA courses and learns about the roles of other professionals involved in patient treatment. Prerequisites: OTA 101, 120, BIO 112, PSYC 124. To be taken concurrent with OTA 102, 112, 122 and 232. (Sp) 0 credits

OTA 112: Occupational Therapy with Adults

An overview of disabilities and diseases that affect adults, and the study of occupational therapy theory and practice as they pertain to the treatment of

these disabilities. Prerequisites: OTA 101 and 120, BIO 112, and PSYC 124. (Sp) 3 credits

OTA 112L: Treatment Modalities Laboratory

A laboratory course in occupational therapy to complement OTA 112; must be taken concurrently with OTA 112. Laboratory: 2 hours per week. (Sp) 1 credit

OTA 120: Human Neuroscience with Kinesiology Lab

A study of the human nervous system with a focus on sensory and motor behavior. The lab is a focus on anatomy and physiology including assessment of function. Prerequisite: concurrently or after OTA 101 and the biology requirement. Class: 3 hours per week. Laboratory: 2 hours per week. (Fa) 4 credits

OTA 122: Occupational Therapy with the Elderly

An overview of disabilities and diseases that affect the elderly, and the study of occupational therapy theory and practice as they pertain to the treatment of these disabilities. Prerequisites: OTA 101, 120, BIO 112, and PSYC 124. (Sp) 3 credits

OTA 122L: Treatment Modalities Laboratory

A laboratory course in occupational therapy to complement OTA 122; must be taken concurrently with OTA 122. Laboratory: 2 hours per week. (Sp) 1 credit

OTA 220: Group Approach in Occupational Therapy

A course designed to enable students to increase knowledge of themselves and the impact of their behavior on others. It will enable the student to understand and use the transfer of feelings, ideas, facts and findings in one-to-one and group relationships as part of the therapeutic process. Prerequisite: concurrent or after OTA 101 and 120. (Fa) 3 credits

OTA 232: Principles of Clinical Management

A course designed to develop the student's ability to formulate treatment plans, document treatment, and understand professional issues of supervision, quality assurance and job performance. Prerequisites: OTA 101 and 120 and concurrent with 102, 112 or 122. (Sp) 3 credits

OTA 242: Level II Fieldwork

Sixteen weeks of clinical training under the direction of an occupational therapy practitioner. Half the training deals with psychosocial dysfunction and half with physical disabilities. Prerequisite: completion of all OTA and general education course work, and Level I Advanced Fieldwork. (Fa,Sp) 11 credits

OTA 244: Advanced Seminar in Occupational Therapy

The study of occupational therapy treatment principles and applications using the single case model; to be taken concurrently with OTA 242. Prerequisite: completion of all OTA and general education course work, and Level I Advanced Fieldwork. (Fa,Sp) 1 credit

Oceanography**OCEN 110: Introduction to Oceanography**

An introduction to the science of the ocean with emphasis on the geological, physical, chemical and biological aspects of oceans. Topics include physical and chemical properties of seawater, circulation, bathymetry, waves, tides, El Niño, and marine plant and animal habitats. A field trip may be included. Class: 3 hours per week. [L,N] (Fa,Sp) 3 credits

Paralegal, See Legal

Philosophy

PHL* 101: Introduction to Philosophy

(formerly PHIL 201)

Development of personal views on the fundamental issues of human existence: the nature of reality, the nature of the human person, knowing and thinking, freedom, basis of morality, aesthetics, the philosophical basis of political systems, and God's existence. Class: 3 hours per week. [H,L] (Fa,Sp,Su) 3 credits

PHL* 111: Ethics

(formerly PHIL 203)

The fundamentals and principles of ethics: moral conscience, good and evil, values, norms, ethical judgment, major ethical systems, punishment, religion and ethics. Contemporary problems with case studies; in particular, issues of environmental and bio-medical ethics. Class: 3 hours per week. [H,L] (Fa,Sp,Su) 3 credits

PHL* 112: Medical Ethics

(formerly PHIL 213: Health Care Ethics)

This course relates specific health experiences and issues to ethical theories of traditional and contemporary philosophy. It includes a critical examination of current opinions on moral issues in health care and gives a fair consideration of those views. Class: 3 hours per week. [H,L] (Sp) 3 credits

PHL* 115/BUS 215: Business Ethics

(formerly PHIL 215/BUS 215)

[B,H,L] (Fa) 3 credits. *See Business.*

PHL* 131: Logic

(formerly PHIL 205)

Logic is the study of sound reasoning, Areas of concern include practical logic, deduction, induction, and symbolic logic. Focus is upon the application of logical distinctions to rational argument, fallacies, definition, and generally to scientific method. Recommended for all students. Class: 3 hour per week. [H,L] (Fa,Sp) 3 credits

PHL* 151: World Religions

(formerly PHIL 207: Religions of the World)

Survey of the major religions of the world: Christianity, Judaism, Islam, Buddhism and Hinduism, with emphasis on essential doctrines and practices. A review of contemporary cults and sects. Class: 3 hours per week. [H,L] (Fa,Sp) 3 credits

PHL* 153: Buddhist Philosophy

(formerly PHIL 227)

An examination of the predominant philosophical themes in divergent traditions of Buddhism. Some topics to be covered are metaphysics, ethics, aesthetic concepts, and the Buddhist values for confronting contemporary problems. Recommended for all students. Class: 3 hours per week. [H,L] (O) 3 credits

PHL* 163: Chinese Philosophy

(formerly PHIL 211)

An inquiry into the concept of order and harmony in Chinese philosophy. Readings in English translation will include both primary texts and contemporary analyses of materials from Confucianism, Taoism, and other Chinese philosophic schools. Recommended for all students. Class: 3 hours per week. [H,L] (O) 3 credits

Photography

PHOT 191: Photography I

An introduction to basic camera operation, black and white darkroom procedures, non-silver processes, photographic genres, and visual language. Students must have a 35mm camera with manual exposure controls and provide their own film and paper. Class: 4 hours per week. Laboratory: extensive lab work is required outside these hours. [H,L] (Fa,Sp) 4 credits

PHOT 159: Documentary Photography

This course will teach students how to prepare a comprehensive documentary project. Students will be introduced to the concepts and vocabulary of Documentary Photography. Instruction will include discussion and slides about documentary photography and documentary photographers, as well as selection of topics and preparation of the final project. Prerequisite: PHOT 191. [H,L] (Fa) 4 credits

PHOT 192, PHOT 293, PHOT 294: Photography II, III, IV

A continuation of black and white photography, including refining printing and presentation, and the development of a body of work. A written and oral presentation on a published photographer will be required. Students must have a 35 mm camera with manual exposure controls, and provide their own film and paper. Photography III and IV encourages the use of medium and large formats and digital photography. Class: 4 hours per week. Laboratory: extensive lab work is required outside these hours. Prerequisite: PHOT 191 or permission of instructor. [H,L] (Fa,Sp) 4 credits

PHOT 210: Digital Photography

An introduction to digital photography and specifically Adobe Photoshop, through the use of the students' own photographs and negatives. Students will be introduced to the basic vocabulary, concepts, and tools of Photoshop. Through lectures, slides, demonstrations and assignments, students will learn the fundamentals of digitizing, manipulating and printing their own photographs. Prerequisite: Basic computer and photographic experience preferred. Class: 4 hours per week. [H,L] (Sp) 4 credits

PHOT 256: Portfolio Preparation

Through the production of photographic works, class discourse, and critiquing photographs, students will learn how to develop a cohesive portfolio. Prerequisite: PHOT 191. [H,L] 4 credits

PHOT 259: Alternative and Experimental Photography

Students will experiment with a variety of alternative processes and cameras. These processes will include: infrared, cyanotype, Van Dyke, liquid emulsion, Polaroid transfers, large photographs, and pinhole or plastic cameras. Students must have 35 mm camera with manual exposure controls and provide their own film, paper, and supplies as needed. Prerequisite: PHOT 190 or permission of instructor. [H,L] 4 credits

PHOT 260: Lighting and Advanced Printing Techniques

Through class demonstrations and assignments students will begin to understand how different lighting and printing techniques affect the subject and meaning of a photograph. Prerequisite: PHOT 191 or permission of instructor. [H,L] 4 credits

Physical Education *See Health, Physical Education.*

Physical Science

PHSC 100: Principles of Physical Science

An introduction to the physical sciences that provides an integrated treatment of facts, topics and concepts from physics and chemistry. Applications in astronomy and geology are included. Class: 3 hours per week. Prerequisite: MATH 101 or math placement test. Not open to students who have passed higher-numbered courses in the physical sciences. [L,N] (O) 3 credits

PHSC 101: Principles of Physical Science

This course provides an introduction to the physical sciences with an integrated approach between classroom presentation and laboratory experimentation. Topics include measurement, the scientific process, concepts from physics and chemistry. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: MATH 101 or math placement test. Not open to students who have passed higher-numbered courses in the physical sciences. [L,N] (O) 4 credits

PHSC 115: Explorations in Science for Women

An interdisciplinary course focusing on the use of biology, chemistry, physics, mathematics and technology to solve problems. It will incorporate both content and the development of study skills in these areas. This course is strongly recommended for women who would like a better understanding of how science, mathematics and technology effect their lives and the career possibilities in these fields. [L,N] (O) 3 credits

Physical Therapist Assistant

All Physical Therapist Assistant courses are offered at Naugatuck Valley Community College, Waterbury, CT.

PTA* 120: Introduction to Physical Therapy

(formerly PT 101)

Learning opportunities in this course assist the student to recognize the roles of physical therapy within various practice settings. Students differentiate functions of physical therapists and physical therapist assistants as members of the health care team through study of documentation principles, ethics, laws and organizations important to the provision of services. Learning also includes development of knowledge and abilities within the domains of conduct, communication and sensitivity to individual and cultural differences. Prerequisite: Admission to the PTA* Program. (Sp) 3 credits

PTA* 125: Physical Therapy for Function

(formerly PT 102 - Therapeutic Techniques in Physical Therapy)

This course provides the student with introductory concepts and techniques for effective patient teaching and physical therapy intervention for function and mobility. Emphasis is placed on competence in problem-solving and the physical therapist assistant's role in modification of physical therapy interventions. Prerequisite: Admission to the PTA* Program. (Sp) 4 credits

PTA* 220: Introduction to the Physical Therapy Clinic

(formerly PT 106)

This course provides an orientation to the physical therapy clinic and to the provision of physical therapy interventions. Students develop communication, intervention, and problem-solving techniques within the physical therapy clinic. Prerequisite: PTA* 120 and PTA* 125 with a grade of "C" or higher. (Su) 1 credit

PTA* 230: Physical Agents in Physical Therapy

(formerly PT 110 - Modalities in Physical Therapy)

This course develops the student's competence with problem-solving and application of physical therapy interventions using physical agents, including therapeutic applications of heat, cold, water, electricity, light and mechanical forces or devices. Prerequisites: PTA* 120 and PTA* 125 with a grade of "C" or higher, PTA* 220 with a grade of "P". (Fa) 4 credits

PTA* 235: Kinesiology for Rehabilitation

(formerly PT 111 - Kinesiology)

This course fosters learning of the anatomical and biomechanical principles of human movement through the study of the musculoskeletal and nervous systems. Competencies attained include accurate data collection by goniometry, manual muscle testing, posture and gait analysis including the effects of biomechanical forces on the human body. Prerequisites: PTA* 120 and PTA* 125 with a grade of "C" or higher, PTA* 220 with a grade of "P". (Fa) 4 credits.

PTA* 250: Therapeutic Exercise

(formerly PT 201)

Learning includes the theory and techniques to safely and effectively implement therapeutic exercise interventions based on a plan of care established by a physical therapist. Students also develop competence to measure a patient's response to interventions and respond accordingly and to provide effective instruction to patients and caregivers. Prerequisites: PTA* 230 and PTA* 235 with a grade of "C" or higher. (Sp) 5 credits

PTA* 253: Pathophysiology for Rehabilitation

(formerly PT 202 - Human Development and Pathology)

This course develops comprehension about abnormalities and the physical, physiological and psychological changes that occur throughout the human lifespan. The student learns the effects of pathology on the rehabilitation of patients with orthopedic, neurological, and general medical conditions. Prerequisites: PTA* 230 and PTA* 235 with a grade of "C" or higher. (Sp) 3 credits

PTA* 258: PTA in the Healthcare Arena

(formerly PT 210 - Physical Therapist Assistant Seminar)

This course develops the student's ability to apply physical therapy interventions and data collection techniques within the clinic environment and advances the student's abilities with communication, conduct and problem-solving within the structure of the health care system. Prerequisites: PTA* 230 and PTA* 235 with a grade of "C" or higher. (Sp) 2 credits

PTA* 260: Physical Therapy Seminar

(formerly PT 211 - Clinical Practicum I)

In this course students demonstrate the ability to apply principles of problem solving to selected professional issues, industry trends, and special populations that may be encountered as a physical therapist assistant. Learning opportunities assist in the transition from student to clinician and identification of interest areas for lifelong learning. Prerequisites: PTA* 250, PTA* 253 and PTA* 258 with a grade of "C" or higher. (Fa) 2 credits

PTA* 262: PTA Internship II

(formerly PT 212 - Clinical Practicum II)

Within this clinic-based course students learn to integrate and apply physical therapy concepts and to effectively perform physical therapy interventions as a physical therapist assistant. Students develop their abilities for daily organization and management of a patient caseload and effectively contribute to the health care team. Prerequisites: PTA* 250, PTA* 253 and PTA* 258 with a grade of "C" or higher. (Fa) 5 credits

PTA* 265: PTA Internship III

(formerly PT 213 - Clinical Practicum III)

Within this clinic-based course students learn to problem-solve and competently function in the clinic environment as a physical therapist assistant. Students develop competence with time management, clinical prioritization and the entry-level abilities of the physical therapist assistant prior to course completion. Prerequisites: PTA* 250, PTA* 253 and PTA* 258 with a grade of "C" or higher. (Fa) 5 credits

Physics

PHYS 110: Elements of Physics

An introductory course in the physics of motion, heat, sound, electricity, magnetism, light, optics and the theory of the atom. Intended for non-science majors. A process oriented laboratory approach emphasizing exploration and problem solving. This course is intended for students who need only one semester of physics. Students with credit for high school physics should elect PHYS 121 or 131. Scientific calculator required. Class meets 5 hours per week for integrated lecture and laboratory. Prerequisite: MATH 101 or math placement test. [L,N] (Fa,Sp) 4 credits

PHYS 111: Physics and the Human Body

An introductory course in physics commonly taken by students in the allied health sciences and related disciplines. Numerous applications and examples related to the health sciences are used throughout to illustrate physical principles in mechanics, heat and thermodynamics, electricity and magnetism, and wave phenomena. Special attention is devoted to energy and power in humans, heat and the human body, aspects of electricity in the human body, and applications of electromagnetic radiation. This course may be taken as alternate elective in place of PHYS 110 in any program which PHYS 110 is recommended as an elective. Students cannot receive credit for both PHYS 110 and 111. Scientific calculator required. Class and laboratory: 5 hours per week; integrated approach with approximately 3 hours class and 2 hours laboratory. Prerequisite: MATH 101 or math placement exam. [L,N] (O) 4 credits

PHYS 121: General Physics I

Basic concepts of mechanics and heat, including forces, work and energy, conservation laws, physics of fluids, temperature, heat transfer and the laws of thermodynamics. Students who need only one semester of physics should elect PHYS 110. Scientific calculator required. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: MATH 102, or two years of high school algebra, or math placement test. [L,N] (Fa,Su) 4 credits

PHYS 122: General Physics II

Basic concepts of electricity, magnetism and wave motion, including electric and magnetic fields, electromagnetic radiation, wave properties of light and optics. Scientific calculator required. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: PHYS 121. [L,N] (Sp,Su) 4 credits

PHYS 131: University Physics I

A study of Newtonian mechanics and thermodynamics intended for physics, chemistry, engineering and math transfer students. Topics include particle and rigid body dynamics, work, momentum and energy conservation, gravitation, fluids, heat, and the laws of thermodynamics. A TI-85 graphing calculator or its equivalent is required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisites: Successful completion of Math 190 or Math 191, and Phys 110 (or successful completion of one year of high school physics). [L, N] (Sp) 4 credits

PHYS 132: University Physics II

A study of electricity, magnetism, waves, and optics intended for physics, chemistry, engineering and math transfer students. Topics include Coulomb's Law, electric and magnetic fields, Gauss' Law, electric potential, capacitance, Ohm's Law, dc and ac circuits, induced emf: inductance, simple harmonic motion, wave properties for sound and light, and geometrical optics. A TI-85 graphing calculator or its equivalent is required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisites: Successful completion of Phys 131 and Math 192. [L, N] (Fa) 4 credits

PHYS 133: University Physics III

Intended for physics, engineering and math transfer majors. Principles of quantum radiation and modern physics, including electromagnetic waves,

relativistic mechanics, quantized radiation, and an introduction to 20th century physics are studied. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisites: PHYS 132, MATH 293 (may be taken concurrently). [L,N] (O) 4 credits

Political Science

POL * 101: Introduction to Political Science

(formerly PLSC 101)

The study of politics through the identification of great political issues that are analyzed from historical and philosophical viewpoints. Class: 3 hours per week. [L,S] (Fa) 3 credits

POL * 103: Introduction to International Relations

(formerly PLSC 102: International Relations)

An examination of the international community, emphasizing theory and practice in international politics. Class: 3 hours per week. [L,S] (Sp) 3 credits

POL * 111: American Government

(formerly PLSC 111: American National Government)

A study of the American political system at the national level, with emphasis on political dynamics and public policy. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

POL * 112: State & Local Government

(formerly PLSC 112)

The forms, functions, processes and problems of state and local government in the United States, with special emphasis on Connecticut state government. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

POL * 120: Introduction to Law

(formerly PLSC 120)

This course serves as an introduction to the study of law with an overview of fundamental concepts and principles of our legal system. A variety of legal topics, terminology, and areas of law are discussed in order to assist students in acquiring an appreciation of the dynamic role of law in our changing society. Students are introduced to the roles of legal professionals, including paralegals. Legal reasoning, legal ethics, and legal research methods are also presented. Class 3 hours per week. Prerequisite: Eligibility for ENG 111 or permission of instructor. [S, L] (Fa,Sp) 3 credits

POL * 212: Constitutional Law and Civil Rights

(formerly PLSC 212)

An examination of the United States Constitution as it applies to police power and landmark decisions of the United States Supreme Court interpreting and defining police power. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits

POL * 293: Connecticut Legislative Internship

(formerly PLSC 280: Legislative Internship)

Spring semester only. Students must apply in October. Selected students will spend two days per week interning at the State Capitol. Interns will be prepared to perform the following services for legislators: bill analysis and tracking, spot research, drafting news releases, and constituent casework. (Sp) 6 credits

Psychology

PSYC 111: General Psychology

Survey of psychology as a behavioral science, including its scientific origins: human development, learning, memory and thinking, motivation and emotion, personality, intelligence and social psychology. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

PSYC 112: Advanced General Psychology

Study of research and measurement techniques in psychology; the physiological bases of behavior, sensation, perception and abnormal patterns of behavior; major therapies; and altered states of consciousness. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp) 3 credits

PSYC 117: Psychology of Death, Grief and Loss

This course will examine the processes of death, dying and grieving. Death and loss as they relate to major developmental life tasks are also studied, including the effect of death and loss upon survivors. Both Eastern and Western perspectives are considered. [L,S] (Fa,Sp) 3 credits

PSYC 120: Understanding Self and Others

Personal growth and development through awareness of one's impact on others and the impact of others on oneself. [L,S] (Fa,Sp,Su) 3 credits

PSYC 124: Developmental Psychology

A survey of cognitive, social, psychomotor and perceptual growth and change as they are influenced by heredity and environment from prenatal stages through childhood, adolescence, mid-life and aging. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp,Su) 3 credits

PSYC 125: Psychology of Aging and Mental Health

The course will offer a realistic portrait of the personal experiences of late life and highlight the mental health issues that confront human beings as they age. [L,S] (Sp) 3 credits

PSYC 127: Psychological Aspects of Human Sexuality

This course considers the influence of interacting psychological and social factors upon human sexual behavior, with a strong emphasis on attitudinal and affective learning. Developmental issues, including the effects of past sexual trauma, are explored. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (O) 3 credits

PSYC 131: Social Psychology

Social psychology focuses upon the effects of groups upon the individual and how the individual influences the group. The course examines theoretical attempts to explain how people influence each other. Topics include one-to-one relationships, group formation, group structure and leadership. A group project is required. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Sp) 3 credits

PSYC 163: Children With Disabilities and Their Families

This course is a general introduction to children with disabilities, their families and their education. The course includes discussion of the psychological, medical and sociological aspects of children with disabilities and their relationship to family, community and especially the educational system. The course emphasis is on the inclusion of children with disabilities within family, community and school. [L,S] (Fa) 3 credits

PSYC 173: Adults with Disabilities

This course is a general introduction to adults with disabilities and the issues faced by them in current American society. The emphasis is on issues relating to full inclusion in neighborhoods, community associations, workplaces and leisure-recreation experiences. The Americans with Disabilities Act (ADA) and its powerful implications for full community inclusion by men and women with disabilities will be examined. [L,S] (Sp) 3 credits

PSYC 183: The Learning Process and Disabilities

This course explores various learning theories, especially behavior modification, as they relate to children and adults with disabilities. Included will be an introduction to the biological aspects of the brain and learning. Ethical questions regarding the application of certain learning theories will be examined. [L,S] (Fa) 3 credits

PSYC 193: Issues and Trends in Disabilities

This course will examine current legal, ethical, community, family and personal support issues affecting children and adults with disabilities and their families. Through the study of literature, newsletters and media accounts and by listening to the leaders and advocates of today, students will more fully understand the challenges and opportunities of people with disabilities. [L,S] (Sp) 3 credits

PSYC 200: Health Psychology

The psychological factors that promote health and enhance resistance to disease or place people at risk for disease are explored. Emphasis is placed upon those psychological factors which can prevent or reverse illness and sustain or recapture health. Class: 3 hours per week. [L,S] (O) 3 credits

PSYC 210: Abnormal Psychology

Origins and models of normal and abnormal behavior. Areas presented include anxiety disorders, schizophrenia, infantile autism and personality disorders. Consideration of prevention and treatment methods for emotional and behavioral disorders. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp) 3 credits

PSYC 232/CJ 232: Social Psychology of Criminal Behavior

This course will provide an overview on the psychological understanding of crime and the criminal. It will provide an analysis of individual differences in various criminal activities with a focus on a conceptual and practical understanding of the predictors of individual behavior. Class: 3 hours per week. [L,S] (O) 3 credits

PSYC 234: Child Development

An evaluation of current issues, theories, and research in the area of child development. This study of physical, cognitive and socioemotional development includes: genetics, development of self, language, play, learning, intelligence, personality, and social interactions from conception through age twelve. Emphasis is on normal development. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp) 3 credits

PSYC 240: Organizational Behavior

A survey of the psychological factors that influence the individual in the work setting. Includes employee attitudes, motivation, group dynamics, decision making, leadership, assessment and training as an introduction to human resource management. [L,S] (Fa,Sp) 3 credits

PSYC 243: Supervision: Leadership Behavior

The supervisory function in profit and nonprofit organization involves the ability to work with and through people. Topics studied include: motivation, leadership style, communications, performance appraisal, time management, stress, and workers with special needs. [L,S] (O) 3 credits

PSYC 244: Adolescent and Adult Development

An exploration of current problems, theories and research in adolescent and adult development. A basic exploration of physical, cognitive, and socioemotional changes and the psychological dynamics which accompany them including adjustments, changing roles, and social relationships. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp) 3 credits

PSYC 250: The Psychology of Sport

This course examines psychological theories and research related to sport and exercise behavior. The course is designed to introduce you to the field of sport and exercise psychology by providing a broad view of the major topics in the area. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp) 3 credits

Quality Assurance

Quality assurance courses are offered by the College in cooperation with local industrial organizations and the American Society for Quality Control.

QA 100: Statistical Process Control

An introduction to the concepts of manufacturing statistical process control. Topics include: measures of central tendency, measures of variation, normal distribution theory, process run charts, process control charts for variable and attribute data, normal probability plots, Pareto diagrams and cause and effect diagrams. Class: 3 hours per week. Prerequisite: MATH 108 or MATH 111. (Fa,Sp) 3 credits

QA 110: Measurement and Measurement Systems

An introductory course in the techniques of making successful measurements for dimensions, pressures, temperatures and other manufacturing process variables. The design and use of automated measuring and test equipment will be discussed. Methods for establishing controls for preparation and use of inspection gaging will be discussed. Prerequisite: ENGR 101. (Sp) 3 credits

QA 120: Inspection and Gaging

An introductory course that will cover the use of inspection gages. Students will gain hands-on experience with a variety of gages and measuring instruments. Basic concepts of angle measurement and true position layout will be discussed. Class: 3 hours per week. Prerequisites: ENGR 101 and QA 110. (Fa) 3 credits

QA 140: Layout Inspection

A course in the applications of engineering drawing interpretation and layout inspection techniques for detailed inspection of manufactured products. Students will become familiar with layout equipment such as rotary heads, sine plates, precision gage blocks and pins. Students will learn when and how to apply geometric true positioning concepts. Class: 4 hours per week. Prerequisites: ENGR 101, QA 100, QA 110, QA 120. (Sp) 4 credits

QA 150: Statistical Methods of Quality Improvement

A course in various statistical methods and their applications in industry. Course concentration will deal with the use of statistical logic and methods to aid in the solution of quality, production and engineering type problems. Class: 3 hours per week. Prerequisite: QA 100. (Fa) 3 credits

Quantitative Methods

QM 110: Quantitative Methods for Business Careers

A broad introduction to mathematical problems most commonly associated with business-oriented careers. Topics presented include bank reconciliation, payroll, simple and compound interest, credit cards, mortgages, depreciation and inventory. This course provides students with sufficient background to assist them as consumer decision-makers and future employees of business firms. (Fa,Sp) 3 credits

Recreation

REC 101: Introduction to Recreation and Leisure Studies

This course serves as an introduction to the field of recreation and leisure service. The student will understand the development of the recreation movement from early ages to the present with emphasis on future perspectives. Cultural, economic, and social factors in reference to leisure participation will be explored. Career opportunities in a variety of settings will be highlighted. Philosophies of recreation will be discussed. Students will develop a personal philosophy of recreation and leisure. (Fa) 3 credits.

Respiratory Care

These courses are open only to students in the Respiratory Care program.

RC 201: Clinical Practice

Placed in various clinical situations under the supervision of clinical instructors, students perform techniques learned in the classroom. (Fa) 1 credit

RC 202: Clinical Practice

Placed in various clinical situations under the supervision of clinical instructors, students perform techniques learned in the classroom. (Sp) 1 credit

RC 203: Clinical Practice

Placed in various clinical situations under the supervision of clinical instructors, students perform techniques learned in the classroom. (Su) 1 credit

RC 204: Clinical Practice

Placed in various clinical situations under the supervision of clinical instructors, students perform techniques learned in the classroom. To be taken concurrently with RC 251. (Fa) 2 credits

RC 205: Clinical Practice

Placed in various clinical situations under the supervision of clinical instructors, students perform techniques learned in the classroom. (Sp) 2 credits

RC 211: Applied Pharmacology

The study of the composition, indication and effects of medication administered to patients, with emphasis on the drugs prescribed for the cardiopulmonary system. (Sp) 3 credits

RC 221: Respiratory Care I

An introduction to the anatomy and physiology of the respiratory system including an in-depth study of normal breathing. Assessment of the pulmonary patient concludes the course. (Fa) 3 credits

RC 222: Respiratory Care II

The theory and administration of respiratory care procedures including airway management, monitoring devices, and clinical assessment of the respiratory patient will be taught. Prerequisite: RC 221. (Sp) 3 credits

RC 241: Ventilation Therapy I

The theory and function of gas administration systems and devices will be taught. Medical gases, regulators and oxygen delivery systems are discussed. (Fa) 3 credits

RC 242: Ventilation Therapy II

A study of the volume ventilators used in respiratory care with an in-depth explanation of mechanical and functional operation. Indications, hazards and complications for continuous ventilation of the patient are stressed. Prerequisite: RC 241. (Su) 3 credits

RC 251: Advanced Respiratory Care I

A study of the pulmonary and cardiac circulation, hemodynamic monitoring, and fluid and electrolyte balance as it relates to cardiopulmonary medicine. Prerequisite: BIO 153. (Fa) 3 credits

RC 261: Advanced Respiratory Care II

A study of the respiratory care modalities used in the care of neonatal and pulmonary rehab patients. (Each population will be discussed in separate units.) Prerequisite: RC 251. (Sp) 3 credits

RC 282: Clinical Application I

A study of cardiopulmonary abnormalities and their treatment. Acute and chronic diseases of congenital, accidental, malfunctioning and microorganismal origin are studied. To be taken concurrently with RC 251. (Fa) 3 credits

RC 283: Clinical Application II

The study of cardiopulmonary abnormalities and diseases of the neonatal, pediatric and adult patient with major emphasis on diagnosis and treatment. Prerequisite: RC 282. (Sp) 2 credits

Sign Language

SGN* 101: Sign Language I

(formerly ASL 101: American Sign Language I)

American Sign Language (ASL), is the sign language most deaf people use when communicating among themselves. This course utilizes six unit sequences. Students will learn grammatical features, vocabulary and conversational skills including expressive and receptive skills of ASL. In addition, students will learn the culture of the deaf community, the history of ASL and the relationship of ASL to other forms of signing. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits.

SGN* 102: Sign Language II

(formerly ASL 102: American Sign Language II)

This course is a continuation of American Sign Language I. This course utilizes six different unit sequences. Students will learn grammatical features, vocabulary and conversational skills including expressive and receptive skills of ASL. In addition, students will learn the culture of the deaf community, the history of ASL and the relationship of ASL to other forms of signing. Class: 3 hours per week. Prerequisite: SGN* 101. [L,S] (Fa,Sp) 3 credits.

Social Science

SOSC 110: Introduction to Wellness

A survey of contemporary health concepts and concerns that affect life style. Students will learn to apply these concepts by assessing their own level of fitness. Topics include: disease in the United States, health models, fitness, nutrition, stress, drugs, alcohol, tobacco, alternative medicine and the concept of self care. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits

SOSC 150: Transition Development

This course is designed for adult students who are resuming their education. Topics include goal setting, academic and career choices, math anxiety, family and work stresses, problem solving, and skill building. *Open only to students in the Adults in Transition program.* (Fa,Sp) 2 credits

SOSC 155: Women's Issues and the Law

An examination of legal responses to gender-based treatment in society. Legal materials will be studied to provide both a historical and current perspective on issues affecting women and men. Readings will be used as the basis for public policy discussions and greater understanding of the law of sex discrimination. [L,S] (Fa) 3 credits

SOSC 201: Introduction to African/American Studies

An interdisciplinary survey course of the historical, social, economical, political, philosophical and cultural experience of the African American. This course serves as the introductory course to give students an Africentric perspective to evaluating information in society; other philosophical perspectives may be introduced. Recommended for potential U.S. History and American Studies majors. [L,S] (O) 3 credits

SOSC 220: Computers and Their Impact on Society

This is a course in elementary computer concepts and the historical development of computer technology. It emphasizes an introduction to hardware, software and programming. Applications to areas of education, science, business and personal use are among the subjects discussed. Hands-on instruction in BASIC

and a review of major applications are included. This course is not intended for computer information systems majors and will be directed toward persons with no prior knowledge of computers. Class: 3 hours per week. [L,S] (O) 3 credits

SOSC 232: Crime and Punishment

Social crime and justice in America. This course will investigate the kinds of behavior which American society has defined as criminal and the legal treatment responding to such behavior. Class: 3 hours per week. [L,S] (O) 3 credits

SOSC 242: American Families

A look at nuclear American family life from early Colonial period to the present, to see how various commentators have regarded and evaluated American families. Course will rely on the writings of historians, sociologist, novelists and social critics. Class: 3 hours per week. [L,S] (O) 3 credits

SOSC 262: Puerto Rican History and Culture

An introduction to the history and culture of Puerto Rico designed to give both Hispanic and other students an understanding of the historical factors and the cultural concepts that help develop today's Puerto Rico and its people, both on the island and on the mainland. Class: 3 hours per week. [L,S] (O) 3 credits

SOSC 270: Cooperative Education/Work Experience

This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including social service agencies, day care facilities, and corporations. Prerequisites: 12 completed credit hours in the Social Service, Disabilities Specialist, Criminal Justice, Sport and Exercise, Therapeutic Recreation, and Early Childhood/Educational Associate programs. (Fa,Sp) 3 credits. *Please refer to page 19 for more information and general prerequisites for Cooperative Education/Work Experience.*

Sociology

SOC 101: Introduction to Sociology

Introduction to the perspective, working concepts and investigatory methods of the sociologist as they apply to the understanding of social institutions, social processes and social problems. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

SOC 202: Contemporary Social Problems

A detailed analysis of major social problems in American society. Problems including population, ecology, poverty, race and ethnic relations, urbanization, the role of the media, criminal activity, aging, health, and housing will be evaluated. Emphasis is on American society, but some international issues and situations will be examined. Community awareness and involvement will be stressed as students evaluate local issues as well. Prerequisite: SOC 101. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits

SOC 203: Sociology of Deviance

Analysis of social deviance, review and discussion of causes, and possible approaches for controlling deviant behavior. Areas to be studied include mental illness, alcohol and drug abuse, sexual deviance, criminal activity, physical abuse, violent behavior, and collective deviance. Class: 3 hours per week. Prerequisite: SOC 101 or permission of instructor. [L,S] (Fa) 3 credits

SOC 205: Impact of Aging on the Family

This course will consider key social issues and current service delivery systems that affect the aged population. Prerequisite: SOC 101. Class: 3 hours per week. [L,S] (Sp) 3 credits

SOC 211: Juvenile Delinquency

Examines the social aspects of juvenile delinquency and the pressures that cause this behavior to emerge. The organization, functions and jurisdiction of the juvenile court system, as well as processing, detention, case disposition and juvenile delinquency statutes, are examined. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (O) 3 credits

SOC 221: Criminology

Introduces the fundamental principles of criminology; namely, the nature, existence and causation of crime, the problems and procedures involved in the administration of justice, and rehabilitative and corrective treatment. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (Sp) 3 credits

SOC 231: Marriages and Families

This course will explore the complexity and diversity of contemporary family arrangements in American society. Prerequisite: SOC 101. [L,S] (Fa,Sp) 3 credits

SOC 241: Urban Sociology

Discusses the emergence of urban life, the historical development and changing social patterns and life styles in metropolitan America, urban renewal and redevelopment, urban stratification and power, and urbanizing the Third World. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (O) 3 credits

SOC 245: Industrial Sociology

This course seeks to apply sociological principles to the study of industrialization and modernization; the individual in the work organization; the social organization of the work place; power, status, wealth, and advancement; applied problems and the community of the industrial organization. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (O) 3 credits

SOC 251: Sociology of Sport

This course is designed to introduce students to the field of sport sociology by providing a broad overview of the major topics in the area. The course will examine the importance of social forces upon sport activities and organization as well as the economic and political ramifications of sport in American society. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (O) 3 credits

SOC 260: Medical Sociology

An interdisciplinary course on the relationship between social factors and health. Prerequisite: SOC 101. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits

SOC 261: Survey of Women's Issues

An interdisciplinary study of women in contemporary America, making use of the data and methodology of history, psychology and sociology. Class: 3 hours per week. [L,S] (Sp) 3 credits

SOC 262: Women and Violence

The course uses a multidisciplinary approach to explore the historical, social, political, psychological and personal meaning of violence against women. Areas to be studied include sexual assault, battering, incest/child abuse, and sexual harassment. Class: 3 hours per week. [L,S] (Fa) 3 credits

SOC 271: Sociology of Ethnic and Racial Minorities

Focuses on the interrelationship of institutionalized prejudice and discrimination and related aspects of society. The experience of various ethnic and racial minorities in the United States is investigated in studying the origins and functions of subordination for society. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (O) 3 credits

SOC 277: Social Survey Research

This course will introduce students to the logic and skills used conducting social research. Topics include interview and questionnaire design and writing

a research report. Data will be computerized and elementary data analysis performed using a statistical software package. The overall objective is for the student to develop critical thinking skills to become more informed consumers of social survey research. Class: 3 hours per week. Prerequisites: SOC 101 and MATH 101 or by permission of instructor. [L,S] (Sp) 3 credits

Spanish**SPAN 101: Elementary Spanish I**

An introduction to spoken and written Spanish. Emphasis is on basic grammar and developing all four language skills (reading, writing, listening and speaking) with an emphasis on Hispanic culture. No previous Spanish language experience required. Class: 4 hours per week. [H,L] (Fa,Su) 4 credits

SPAN 102: Elementary Spanish II

A second semester course in which students develop all four language skills (reading, writing, listening, and speaking) while studying grammatical structures (preterite, imperfect, and present progressive tenses; object pronouns, reflexive verbs) that are more advanced than those studied in the first semester Spanish course. Hispanic culture will be studied. Class: 4 hours per week. Prerequisite: SPAN 101, one year of high school Spanish, or permission of instructor. [H,L] (Sp,Su) 4 credits

SPAN 108: Elementary Spanish I and II

An intensive, beginning Spanish course in which two semesters of Spanish (101 and 102) are completed in one semester. Students will develop all four language skills. The emphasis in class will be speaking and listening, the assignments will emphasize reading and writing. Hispanic culture will be studied. No previous Spanish language experience required. Class: 8 hours per week. [H,L] (Fa,Sp) 8 credits

SPAN 112: Elementary Career Spanish

Development of speaking and listening ability for understanding and communication in daily situations, with emphasis on oral comprehension, speaking and pronunciation, and the development of a utilitarian vocabulary. SPAN 112 may be substituted for 102; speak with the instructor about the desirability of making this substitution. Class: 4 hours per week. Prerequisite: SPAN 101 or one year of high school Spanish, or permission of the instructor. [H,L] (O) 4 credits

SPAN 125: Spanish Culture

A survey of Spanish culture taught in English. Topics of study include art, music, literature, history, geography, political systems, bullfighting, and culture with a small "c" (use of two surnames, extended families, cuisine, etc.) Class: 3 hours per week. [H,L] (O) 3 credits

SPAN 130: Hispanic Culture

This is an independent study course which is offered in conjunction with an academic trip and is available only to participants of that trip. Pre-trip assignments will prepare the students for the research that will be done in the country of the trip and post-trip assignments will organize and analyze the information observed and collected in the Hispanic country. (This course can be done in English or in Spanish.) Class: hours per week will depend on number of credit hours. Corequisite: student must participate in an academic trip sponsored by MCC. [H,L] (O) 1, 2 or 3 credits

SPAN 135: Hispanic Culture and Conversation

A one-semester, first-level course for two-year career program students which stresses aspects of Hispanic culture, as well as pronunciation and vocabulary skills in Spanish, that would be helpful as an additional tool in future employment, job advancement, and effective fulfillment of daily job routines. Class: 3 hours per week. [H,L] (O) 3 credits

SPAN 145: Mexican Culture

A survey of Mexican culture taught in English. Topics of study includes art, music, literature, ancient civilizations, history, geography, political systems, bullfighting, and culture with a small "c" (use of two surnames, bargaining in the market, extended families, cuisine, etc.). Class: 3 hours per week. [H,L] (O) 3 credits

SPAN 201: Intermediate Spanish I

A third semester course in which grammar, conversation and reading materials are at an intermediate level. Cultural readings will be in Spanish. Class: 4 hours per week. Prerequisites: SPAN 101, and 102 or 112, 108 or two years of high school Spanish or permission of instructor. [H,L] (Sp) 4 credits

SPAN 202: Intermediate Spanish II

A fourth semester course in which the grammar, conversation and reading materials are at an intermediate level. Cultural readings will be in Spanish. Class: 4 hours per week. Prerequisite: SPAN 201 (211) or three years of high school Spanish or permission of instructor. [H,L] (Sp) 4 credits

SPAN 208: Intermediate Spanish I and II

An intensive, intermediate Spanish course in which two semesters of Spanish (201 and 202) are completed in one semester. Students will be taught all four language skills with an emphasis on speaking and listening in class and an emphasis on reading and writing through the assignments. Cultural readings will be in Spanish. Class: 8 hours per week. Prerequisite: SPAN 102 or 112, 108 or two years of high school Spanish or permission of instructor. [H,L] (O) 8 credits

SPAN 211: Intermediate Career Spanish I

Specialized, filmed dialogue situations, taped materials, vocabulary building and aural-oral understanding. Class: 4 hours per week. Prerequisites: SPAN 101 and 102 (112), or 108 or two years of high school Spanish or permission of instructor. [H,L] (O) 4 credits

SPAN 212: Intermediate Career Spanish II

Selected dialogues from career situations, role playing, development of cross-cultural understanding and communication skills. Class: 4 hours per week. Prerequisites: three years of high school Spanish or permission of instructor. [H,L] (O) 4 credits

SPAN 251: Advanced Spanish I

A fifth semester course in which language skills will be reinforced while increased emphasis is placed on composition and conversation. Literature and culture will also be studied in Spanish. Class: 4 hours per week. Prerequisites: SPAN 202, 208 or permission of the instructor. [H,L] (O) 4 credits

SPAN 252: Advanced Spanish II

A sixth semester course in which language skills will be reinforced while increased emphasis is placed on composition and conversation. Literature and culture will also be studied in Spanish. Class: 4 hours per week. Prerequisites: SPAN 202, 208 or permission of instructor. [H,L] (O) 4 credits

Speech See Communication**Student Development****SD 100: Creating Your Own College Success**

This course is designed to help students maximize the value of their college experience. Topics include self assessment, goal setting, decision making, and time management. Emphasis will be placed on the development of a plan leading to a successful college experience. (Fa,Sp) 1 credit

SD 101: Career Life Planning

A course designed to develop the knowledge and skills necessary for lifelong career planning. Students will increase their self-awareness through analysis of self-assessment data obtained from biographical data, interest inventories, value surveys, personality surveys, and ability surveys. Students will also develop personal career directions and strategies for working toward them. Students will be expected to share personal and life experiences in group settings. (Fa,Sp) 3 credits

SD 111: First Year Experience: Foundations for College Success

The course provides students with the skills and knowledge to succeed in college. The course integrates discipline specific course work with assignments which will allow students to practice good college level thinking and learning skills. Topics discussed in the course include critical thinking, reading comprehension, and problem solving. Skills to be developed include time management, research skills and collaborative learning techniques. The course fosters an understanding and appreciation for the diversity of the college community and encourages students to become responsible and enthusiastic participants in their education. Class: 3 hours per week. (Fa,Sp) 3 credits

Surgical Technology

These courses are open only to students in the Surgical Technology program.

SUR* 101: Operating Room Procedures I

(formerly ST 101)

An introduction to theoretical experience of the basic skills used in an operating room: aseptic technique, technologists' arts, instrumentation, draping techniques, and related operating room skills. An explanation of essential patient care concepts necessary for effective functioning in an operating room. (Fa) 4 credits

SUR* 102: Operating Room Procedures II

(formerly ST 102)

An introduction to practical experience of the basic skills used in an operating room: aseptic technique, technologists' arts, instrumentation, draping techniques, and related operating room skills such as mock operations in lab. Includes an extensive survey of various surgical specialties including specific operations in each discipline. (Sp) 4 credits

SUR* 105: Medical Terminology

(formerly ST 105)

An introduction to basic and advanced medical terms used in medicine and surgery. Open to all students with permission of the program coordinator. (Fa) 2 credits

SUR* 201: Seminar in Surgery

(formerly ST 106)

This course serves as a bridge between the preclinical and clinical phases of the program and emphasizes the total picture of the surgical patient. Students learn about health care departments outside the operating room that are integral to diagnosis and treatment of surgical conditions. Presentations by physicians and practitioners emphasize surgical procedures and perioperative care of the patient. (Su) 2 credits

SUR* 220: Clinical Experience I

(formerly ST 220)

An introduction to clinical practice in general and specialty surgical procedures in the operating room and outpatient facilities. Emphasis is on applying skills learned in the pre-clinical courses to clinical practice including experiences in basic operating room procedures and minor surgery. (Su) 2 credits

SUR* 222: Clinical Experience II*(formerly ST 222)*

Clinical practice in the operating room concentrating on experience in basic procedures of general and specialty surgery. (Fa) 4 credits

SUR* 225: Clinical Experience III*(formerly ST 224)*

Clinical practice in the operating room concentrating on experience in advanced levels of general and specialty surgery. Includes classroom preparation for the national certification examination and development of job search skills. (Sp) 4 credits

Theatre**THEA 111: Introduction to Theatre**

An introduction to the theory and practice of live theatre. The course covers how plays are produced, it establishes aesthetics by which live performances can be judged, and looks at the historical origins of current practices. Students read, attend and discuss plays produced by area professional theatre. Prerequisite: ENG 111 (may be taken concurrently). [H,L] (Fa) 3 credits

THEA 115: Modern Dance I

An introduction to modern dance techniques, improvisation, choreography and history. The course includes thorough body warm-up, physically energizing dance sequences and combinations, creative explorations, dance compositions, films and an informal performance. Open to all students. May be taken one or two semesters. Class: 3 hours per week. [H,L] (Fa) 3 credits

THEA 181: Acting I

A first course in acting. Students will focus on relaxation and physical awareness, and on developing their imagination, concentration and characterization skills. They will be introduced to basic vocal and physical techniques. Class: 3 hours per week. [H,L] (Fa,Sp) 3 credits

THEA 182: Acting II

A continuation of THEA 181. Students will focus on script analysis and interpretation, and will expand their emotional, expressive and technical ranges. Class: 3 hours per week. Prerequisite: THEA 181 or equivalent training or experience. [H,L] (Sp) 3 credits

THEA 201: Theatre Practicum

Students earn academic credit by participating in Theatre Wing productions, either on stage or backstage. Credit earned depends on extent of participation and degree of responsibility. Class: by arrangement. *Course may be repeated for up to a maximum of six credit hours.* Prerequisite: THEA 181 or THEA 195, or equivalent training or experience. [H,L] (Fa,Sp) 1-3 credits

THEA 291: Survey of Drama

Critical study of representative plays from classical times to the present designed to promote intelligent and imaginative reading and comprehension of the western world's dramatic traditions. Class: 3 hours per week. Prerequisite: ENG 120 or THEA 111. [H,L] (Sp) 3 credits

Therapeutic Recreation**THRC 115: Introduction to Principles of Therapeutic Recreation**

This course provides a background of study for the field of therapeutic recreation. It encompasses the history and development of the profession with an emphasis on understanding the persons who are served, their disabilities, and the environments in which they live. An experiential approach offers understanding and empathy. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. (Fa) 3 credits

THRC 116: Processes and Techniques in Therapeutic Recreation

This course is designed to provide an overview of the process and techniques used in treatment oriented programs. The course explores leadership skills of the helping professional through an in-depth look at facilitation techniques used in therapeutic recreation, including, but not limited to: creative arts, physical/body movement, mental stimulation, and social interaction in relation to the needs of special population groups. Emphasis is placed on meeting clients' needs through proper activity selection, including activity analysis and program adaptation/modification. Prerequisite: eligibility for ENG 111. (Sp) 3 credits

THRC 215: Therapeutic Recreation Programs: Planning and Implementation

This course involves the student in the study of the therapeutic recreation process with emphasis on program planning. The needs of the client will be met through a well planned process that includes assessing functional abilities and needs, planning program goals and objectives, implementing the program, and evaluating both the program and the client. Prerequisites: THRC 115 and eligibility for ENG 111. (Sp) 3 credits

THRC 230: Leisure and Aging

This course serves as an overview to the delivery of therapeutic recreation services to older adults. The course will assist the student in developing an understanding of the elderly and how activity intervention may be used to reach treatment and rehabilitation goals. The course will focus on issues such as the physiological, psychological, and socio-economic factors of the aging process, leisure resources, community and institutional services, and recreation in assisted living facilities and in long term care settings. (Fa) 3 credits

THRC 280: Professional Practicum in Therapeutic Recreation

This course provides the student with practical experience in a therapeutic recreation setting. The student is required to work a minimum of 200 hours in a community based or medical setting that provides therapeutic recreation services. During this period, the student will apply the knowledge, methods, and leadership techniques which have been learned in academic courses. Students will also participate in 15 hours of classroom discussion during the semester. Prerequisite: completion of all THRC course work. (Fa,Sp) 4 credits

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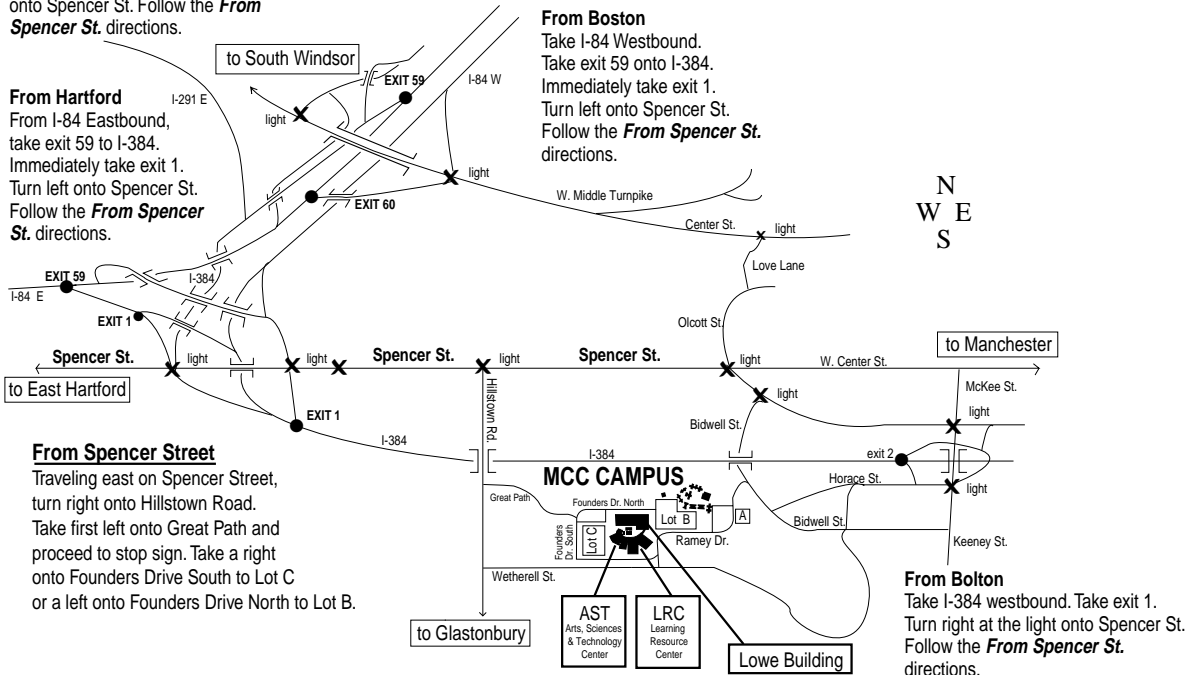
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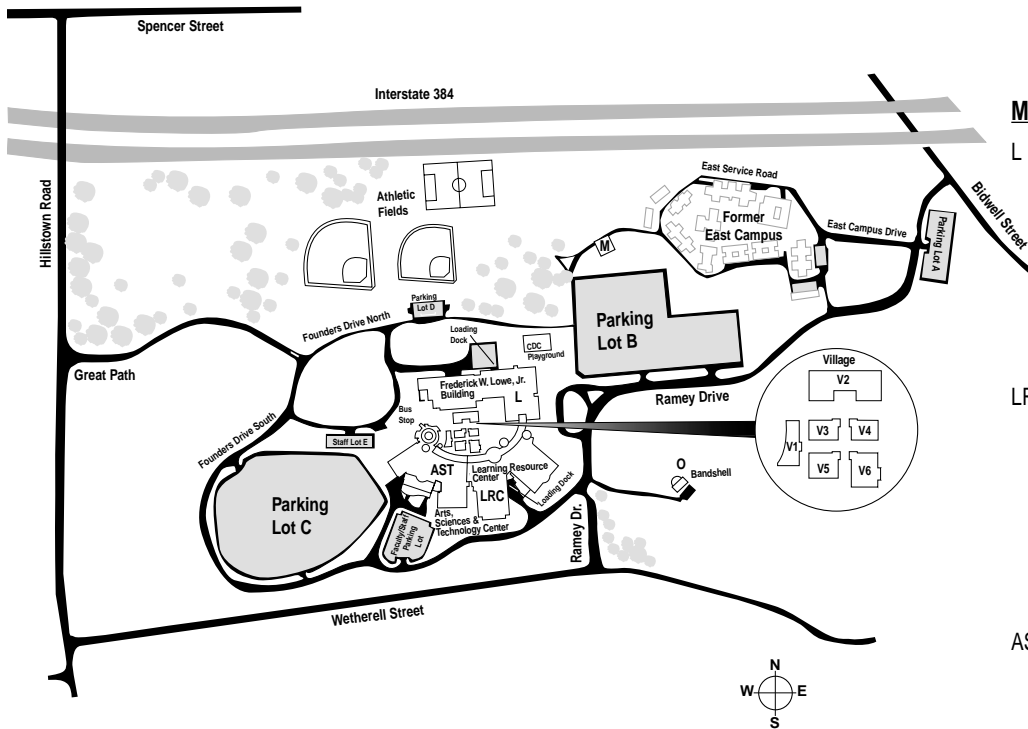
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Manchester Community College Campus



MCC CAMPUS

L Lowe Building:
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Athletics/Fitness Center
Bookstore
Center for Student Development
Classrooms/Faculty Offices
Great Path Academy
Student Activities

LRC Learning Resource Center:
Classrooms/Faculty Offices
Computer Science Labs
Continuing Education
Educational Technology Services
Health Career Labs
Library
TV Studio

AST Arts, Sciences & Technology Center:
Auditorium
Classrooms/Faculty Offices
Chemistry/Physics
Engineering
English
Fine Arts
Mathematics
Photography

V Village:
Buildings V1, V2, V3, V4, V5, V6

M M Building
O Bandshell

Visitors are welcome at the College. Administrative offices are open from 8:30 a.m. until 4:30 p.m., Monday through Friday. Evening hours are available by appointment. Summer session hours are published in the summer session catalog.

Manchester Community College is located in the southwestern corner of Manchester near East Hartford and Glastonbury. College property is bounded on the north by Interstate Route 384.

The main entrance to the College is on Great Path. Visitors are requested to park in lots B or C. Administrative offices are located in the Frederick W. Lowe, Jr. Building at the west end of the campus.

There are designated parking spaces for people with disabilities.



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Spring 03/20M/PR

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Manchester Community College is accredited by the Board of Governors for Higher Education and by the New England Association of Schools and Colleges, Inc., which accredits schools and colleges in the six New England states. Accreditation by the Association indicates that the institution has been carefully evaluated and found to meet standards agreed upon by qualified educators.

Seven programs of study offered by Manchester Community College have been awarded national accreditation. The Occupational Therapy Assistant program has been accredited by the Accreditation Council for Occupational Therapy Education. The Clinical Laboratory Technology Program has been accredited by the National Accreditation Agency for Clinical Laboratory Sciences. The Respiratory Care and Surgical Technology Programs have been accredited by the Commission on Accreditation of Allied Health Education Programs. The Paralegal Program has been approved by the American Bar Association. The Foodservice Management and Culinary Arts Programs have been accredited by the American Culinary Federation Educational Institute Accrediting Commission.

The College is a member of the American Association of Community Colleges (AACC), the American Association of Higher Education (AAHE), the American Council on Education (ACE), the Association of American Colleges and Universities (AAC&U), the Association of College Unions International (ACUI), several chambers of commerce, the National Association for Campus Activities (NACA), the National Council for Resource Development (NCRD), the National Council on Student Development (NCSD), the Southern New England College and University Personnel Association (SNECUPA), and several other organizations.

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